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San Francisco Bay Area Rapid Transit District Annual Report

1964/1965

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San Francisco Bay Area Rapid Transit District Annual Report for the period ending June 30, 195

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GEORGE M. SILLIMAN
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CONTRA COSTA COUNTY

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L. A. KIMBALL, Assistant General Manager
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STANLEY D. FORSYTH, Director, Development and Operations Department
JOHN M. PEIRCE, Director, Finance Department
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JOHN S. DANIELS, Director, Real Estate and Property Department
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WALLACE I. KAAPCKI, General Counsel
WARREN P. MARSDEN, Staff Counsel
W. E. BENEDICT, Director, Administration Department



Bay Area Rapid Transit passengers will ride quickly, safely and comfortably in modern cars like the full-scale prototype pictured on the cover and now on public display. Interior features (above) include soft, low-level lighting focused on the reading area, air comfort control, vista windows treated to resist heat and glare, upholstered seats and carpeted floor. The lightweight electric trains will travel between Alameda and Contra Costa counties by way of twin three-mile tunnels, now under construction (left).

Message from the President

It is with particular pride that I present to the people of the Bay Area Rapid Transit District this 7th Annual Report detailing progress of the rapid transit project during the fiscal year ending June 30, 1965.

The period was one of important transition. After seven years of effort by your Board of Directors and the District's competent staff and consulting engineers, the project has passed from the voluminous sea of concept and theory to the firm ground of head-on construction.

Details of the construction program and other elements of progress are contained in our general manager's report which follows. Suffice to say that the transition from vision to reality was completed during fiscal 1964-65, a fact from which we can draw immense satisfaction since it marks positive progress toward solving the Bay Area's insufferable traffic congestion.

BARTD is constantly mindful that this unprecedented program was made possible by a favorable vote of the electorate of the three counties comprising the District; that construction of the system is being financed primarily by property tax money; that there is a specified limit to the funds and, thus, the time available to accomplish our purpose. I am satisfied that the funds supplied by the people of the District are being spent wisely and prudently, and that every effort is being made to meet the time schedule.

Now, for the first time, we are able to substantiate our efforts with proof of actual construction in Contra Costa and Alameda counties, and in testing activities on the Diablo Test Track. I take this opportunity to invite all residents of the District, and even non-residents so inclined, to visit the Test Center in Concord to view firsthand the evidence of the extraordinary engineering talent and effort being directed toward making the Bay Area's rapid transit system the most modern and advanced in the world.

Adrien J. Falk
President



Testing of advanced rapid transit equipment and techniques for the Area system began during the fiscal year at Diablo Test Track. At top, technicians operate one of four automatic train control systems that will control three laboratory cars, including Car C shown in center picture. Dr. Robert C. Weaver, HHFA administrator, wearing hard hat, was principal speaker at the Test Track opening April 12. With him are B. R. Stokes, BARTD general manager (left), and John C. Kohl, HHFA assistant administrator, transportation.

Report of the General Manager

the Bay Area's blueprint for a revolutionary rapid transit system to clear up its traffic congestion and stimulate attractive urban development began taking tangible shape during the 1964-65 fiscal year.

Construction got underway on the three-twin tunnels linking Oakland and Alameda and on the first segment of aerial line. Diablo Test Track Headquarters in Concord, the system's first building, was completed and landscaped. The first three miles of track were laid, and the first laboratory car was put into operation testing advanced concepts for the Bay Area Rapid Transit District (BARTD).

National attention was focused on the project in April when Dr. Robert C. Weaver, administrator of the U. S. Housing and Home Finance Agency (HHFA), spoke at ceremonies opening the Test Track.

The year was climaxed in June with the unveiling of the BARTD Design Car at a special meeting of the Board of Directors. The Design Car is a full-scale prototype of the trains that will start carrying Bay Area passengers in 1968.

While these were some of the more visible highlights of the fiscal period, there were many other tangible accomplishments in the areas of construction, design, real estate acquisition, test activities, finance, community and governmental relations, and administration.

CONSTRUCTION

It was a year of accelerated activity in the fields, a year of transition from concepts to full-scale construction. Before the fiscal year had ended, construction contracts amounted to more than \$50 million, setting the stage for some \$250 million in construction to be underway in the three BARTD counties in 1965-66.

Directors inaugurated the Berkeley Hills Tunnel project by detonating a charge of dynamite in one of the west portals.

Contracts were also awarded for construction of the final 1½ miles of the Test Track, including a half-mile of aerial structure; laying of track and installation of experimental AC and DC third rail systems on the Test Track; construction of the Test Track building; landscaping the grounds; and manufacture of metallic liners for the system's subway tunnels. Work was completed on the building and was 70 to 80 per cent completed on electrification of the final Test Track construction.

On May 13, the District's consulting engineers (Parsons Brinckerhoff-Tudor-Bechtel) presented an interim report indicating delays in the construction schedule, caused mainly by studies of routing alternatives requested by many of the communities. The revised schedule calls for opening the East Bay line in September of 1968, nine months later than originally planned, and the trans-bay line in May of 1969, a delay of five months.

In a move to prevent delays due to work stoppages, the District, its consulting engineers and some 90 separate unions signed an historic agreement setting up safeguards against strikes and lockouts during the life of the project.

DESIGN

While the construction program gathered momentum, route location work was drawing to a close, paving the way for final engineering, property acquisition and construction. By the year's end, the Board of Directors had approved most of the 75-mile system for final design. The entire trans-bay alignment, from Concord to Daly City, and most of the East Bay line, from Richmond to Hayward, had been approved. Only about 10 miles in Union City, Fremont and San Francisco awaited final adoption.

Thirty of the system's 38 stations had also been approved for final design, and 23 were actually under design by leading Bay Area architects.

BARTD's policy of utilizing the talents of different architects to design different stations, instead of employing one architect to design them all, was established so that each station will achieve a character of its own, suitable to its own unique environment. The Board realizes that the system's ability to lure patrons, and thus be successful, will depend a great deal on the quality of design of the stations.

While assuring each station of a unique quality, the BARTD architectural policy also lays down guidelines to provide uniformity where necessary for proper functioning of the system as a whole. Working within this framework, the project architects are free to use their imagination and skill to design the most convenient, pleasant and efficient stations possible.

Furthering its efforts to produce an aesthetically pleasing system, the Board established an Architectural Review Committee to study all proposed designs and offer suggestions for improvement.

The Board also retained an internationally-known architectural authority, Dr.

John E. Burchard, to recommend a design for the system's 31 miles of aerial structure. After evaluating several proposed designs, Dr. Burchard made his selection, and the Board concurred.

On June 22, the BARTD Design Car was presented to the people of the Bay Area at ceremonies at the Diablo Test Track. Its principal designer, Carl W. Sundberg, president of the industrial design firm Sundberg-Ferar, Inc., Detroit, made the presentation. The car was then put on public display.

REAL ESTATE

By the end of the fiscal year the Real Estate Department had acquired about 1,100 of the 3,500 parcels of land required for the system's routes and stations. Considering the District's obligation to negotiate an equitable agreement with each property owner within a tightly compressed schedule, this was an outstanding achievement. Only three of the 1,100 acquisitions went to trial for settlement.

TEST TRACK ACTIVITIES

Initial steps toward developing technologically advanced equipment for the BARTD system were taken when the Test Track was officially opened at ceremonies April 12 in Concord. Dr. Weaver praised the people of the Bay Area for taking a leading role in a new age of urban transportation by authorizing a \$792 million bond issue to finance construction of the BARTD system.

The HHFA is contributing \$7,352,666 to the District's program to develop new transit equipment and methods. The HHFA Technical Advisory Committee, composed of top transit authorities throughout the nation, inspected the Test Track in May.

Two of the three laboratory cars that will be operating on the Track were delivered during the fiscal period. Initial testing was confined mainly to checking out brakes, traction systems, power and propulsion systems, and train control systems. Installation of all four automatic train control systems to be tested was nearly completed.

FINANCE

To finance the District's accelerated program, the Board adopted a 1964-65 budget amounting to \$7,429,000. It included \$2,185,000 for general administrative purposes and \$5,244,000 for the bond interest and redemption budget. The combined tax rate was set at 17 cents per \$100 assessed valuation—5 cents to raise money for the

general fund and 12 cents to pay interest costs on general obligation (G. O.) bonds.

Interest alone will be paid on G.O. bonds until 1971. Payments on principal will begin in 1972, when the entire 75-mile system is in operation. The financial plan was set up in this manner to keep property taxes at a minimum until residents of the three BARTD counties begin to receive full benefits of the system.

In April, 1965, the Board of Directors adopted a schedule for the sale of another \$180 million to \$225 million in G.O. bonds to be sold as Series C, D, and E during a period extending to April, 1966.

On September 15, 1964, Series B bonds in the amount of \$60,000,000 were sold to a syndicate headed by Halsey, Stuart & Co., Inc., of New York, at a favorable net interest rate of 3.45 per cent. Co-managers of the syndicate include Wells Fargo Bank and Crocker Citizens National Bank, both of San Francisco.

Because the BARTD project will require exceedingly large sums of G. O. bond money during the period of peak construction, the District has adopted a policy of accelerating the sale of bonds to meet future heavy cash drawdown requirements. Building this backlog of funds will enable the District to avoid the excessive impact on the bond money markets that would occur if it waited until the money was needed to meet contract obligations.

An additional grant of \$1,133,333 was approved by the HHFA to finance two-thirds of BARTD's program to develop an automatic fare collection system.

The HHFA also authorized two separate grants to the Alameda-Contra Costa Transit District and the San Francisco Municipal Railway to help finance a study to determine the best way to coordinate the existing systems with the BARTD trunkline network. The BARTD contribution to the \$792,500 project will be \$109,121.

Initial results of BARTD's comprehensive insurance program indicate a trend toward an extremely favorable overall loss experience. The program, put into effect in August of 1964, covers the District, its consultants and construction contractors and with some exceptions subcontractors. An intensified safety program is being conducted as part of the insurance program to promote safety attitudes and minimize losses.

Also during the fiscal period, the Board adopted a report of the general counsel stating that the District is legally bound by the California "Buy American" Act, which

requires governmental agencies to award contracts only to bidders offering items manufactured in the U. S. from materials produced in the U. S.

COMMUNITY AND GOVERNMENTAL RELATIONS

The District's community and governmental relations efforts have been directed specifically toward informing the public of District activities and working with private and public bodies to facilitate the orderly construction of the system.

BARTD continued to negotiate agreements with communities and other public and private agencies for street closures, easements, utility relocation and related matters. Agreements were reached with Contra Costa County and the cities of Walnut Creek and Concord for closing of certain streets adjacent to the Test Track and with the Port of Oakland for a permanent easement under the Oakland Mole for construction of the trans-bay tube. The District executed agreements with the Southern Pacific, Pacific Telephone & Telegraph Company (Bay cables), East Bay Municipal Utility District, Pacific Gas & Electric Company and Western Union concerning relocation of utilities affected by rapid transit construction. Also, BARTD and the State Division of Highways expressed agreement in principle on placing six miles of the central Contra Costa line in the median of a widened freeway between Orinda and Walnut Creek.

A hearing on a request from Berkeley for additional subway concluded with an agreement giving the city the choice of deciding in favor of more subway and paying the extra cost, or accepting the Composite Report plan favored by BARTD.

The District's community relations functions also included answering thousands of inquiries from the public and news media; appearing before civic groups throughout the District to deliver progress reports; conducting press conferences and ceremonies for major events, and public information meetings to acquaint residents with plans for stations and route alignments in their areas; dispensing information to the public and news media in printed form, and producing a motion picture recording progress of the project. The film is being made available to schools, service organizations and civic groups.

An intensive public education program to inform central Contra Costa County residents of the dangers of trespassing on BARTD right-of-way was held when the Test Track third rail was electrified.

An amendment to the State Public Utilities Code was passed which enabled BARTD to appoint a referee to conduct public hearings and report to the Board of Directors for its decision.

Other State legislation set a limit of \$133 million in Bay Bridge toll money to finance construction of the trans-bay rapid transit tube and its approaches.

The year's three major public events the Test Track opening, the start of construction on the Berkeley Hills tunnel and unveiling of the BARTD Design Car received nationwide news coverage.

ADMINISTRATION

The necessary outgrowth of BARTD expanded construction and design program has been the requirement for additional personnel. The District began the fiscal year with 116 positions and filled another 19 before the year ended, bringing the staff to 135 to handle the increased workload.

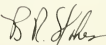
Two new directors were appointed to the Board: Felix F. Chialvo, vice mayor of Oakland, named to fill the unexpired term of Oakland Mayor John C. Houlihan, who resigned; and William M. Reedy, a San Francisco union official, appointed to replace Thomas Gray, manager of the Downtown Association, whose term expired.

Adrien J. Falk of San Francisco was elected to his sixth term as president of the Board, and Newell B. Case of Walnut Creek was elected vice president, replacing Arnold C. Anderson of Castro Valley.

The Board of Directors during the year took official note of the outstanding contribution to the development of rapid transit made by Kenneth M. Hoover, BARTD director of the Department of Development and Operations who retired in February. His position was filled by Stanley D. Forsythe, formerly senior consultant to Parsons Brinckerhoff-Tudor-Bechtel and nationally-recognized transit authority.

Reviewing the fiscal year 1964-65 he given me a sense of deep satisfaction and pride in the dedicated, hard-working organization that is making this revolutionary rapid transit system a reality. It is a difficult and highly complex job, but the job is getting done, reasonably on schedule and within the budget allotted by the electorate.

This report is respectfully submitted to the Board of Directors pursuant to Section 28834 (c) of the Public Utilities Code.


B. R. Stokes
General Manager



The Bay Area Rapid Transit system's first segment of aerial line was nearly completed during the 1964-65 fiscal year. This half-mile stretch, part of Diablo Test Track, is near Walnut Creek.

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

BALANCE SHEET

June 30, 1965

ASSETS

Current assets:

Cash (including time deposits of \$43,300,000)		\$ 45,236,797
U. S. Treasury bills, at cost		13,375,814
Miscellaneous receivables		901,569
Total current assets		<u>59,514,180</u>

Fixed assets, at cost:

Office furniture and equipment	\$ 148,411	
Construction in progress (estimated cost to complete \$931,556,717)—Note D	<u>70,208,949</u>	70,357,360

Other assets:

Debt Service Fund assets (including cash of \$3,755,890)—Note A	3,805,364	
Contract deposit with State of California (U. S. Treasury bond)	<u>2,596,750</u>	6,402,114
		<u>\$136,273,654</u>

LIABILITIES AND CAPITALIZATION

Current liabilities:

Construction contracts		\$ 6,426,669
Other		<u>204,003</u>
Total current liabilities		6,630,672

Other liabilities:

Withheld from contractors on progress payments	\$ 440,674	
Due to State of California—Note C	<u>1,890,000</u>	2,330,674

Debt Service Fund—Note A

3,805,364

Capitalization:

Construction funds:

General Obligation Bonds (\$792,000,000 authorized to be issued; \$110,000,000 issued and outstanding)—Note A	110,000,000	
U. S. Government Grants—Note B	5,571,334	
State of California Grant—Note C	<u>4,410,000</u>	
	119,981,334	
Accumulated net revenue	<u>2,656,981</u>	
Total construction funds	122,638,315	
General Fund accumulated net revenue	<u>868,629</u>	123,506,944
		<u>\$136,273,654</u>

SEE ACCOMPANYING NOTES.

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

STATEMENT OF REVENUE AND EXPENSES AND ACCUMULATED NET REVENUE

For the year ended June 30, 1965

	CONSTRUCTION FUNDS	GENERAL FUND
Revenue:		
Taxes	\$ —	\$ 2,021,775
Interest	2,600,081	18,446
Other	22,325	3,136
Total revenue	<u>2,622,406</u>	<u>2,043,357</u>
Expenses:		
Salaries and employee benefits	—	940,845
Legal fees	90,787	62,466
Other professional services	56,532	85,633
Specialized services	4,767	59,977
Rent and office expense	—	167,067
Transportation	—	63,491
Other	3,366	34,627
Total expenses	<u>155,452</u>	<u>1,414,106</u>
Excess of revenue over expenses	2,466,954	629,251
Accumulated net revenue at beginning of year	190,027	239,378
Accumulated net revenue at end of year	<u>\$ 2,656,981</u>	<u>\$ 868,629</u>

PORT SERVICE FUND

For the year ended June 30, 1965

Balance at beginning of year		\$ 2,670,453
Revenue:		
Taxes	\$ 5,066,580	
Interest	272,019	
Other	27,403	
	<u>5,366,002</u>	
Less matured interest	4,231,091	1,134,911
Balance at end of year—Note A		<u>\$ 3,805,364</u>

SEE ACCOMPANYING NOTES.

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

STATEMENT OF FIXED ASSETS

Year ended June 30, 1965

	BALANCE AT JUNE 30, 1964	ADDITIONS	BALANCE AT JUNE 30, 1965
Office furniture and equipment	\$ 81,942	\$ 66,469	\$ 148,411
Construction in progress:			
Right of way	4,201,878	27,992,630	32,194,508
Engineering	8,154,438	21,340,836	29,495,274
Track and structures	397,579	5,666,677	6,064,256
Electrification	—	830,999	830,999
Yards and shops	—	486,738	486,738
Utility relocation	27,716	296,660	324,376
Train control	—	12,310	12,310
General	65,475	735,013	800,488
	<u>12,847,086</u>	<u>57,361,863</u>	<u>70,208,949</u>
	<u>\$ 12,929,028</u>	<u>\$ 57,428,332</u>	<u>\$ 70,357,360</u>

SOURCES OF FUNDS INVESTED IN FIXED ASSETS

Year ended June 30, 1965

	BALANCE AT JUNE 30, 1964	ADDITIONS	BALANCE AT JUNE 30, 1965
Advance by State of California (expenditures applicable to tube approaches)	\$ 67,181	\$ 482,564	\$ 549,745
Contributed capital:			
Local appropriations:			
Proceeds of general property tax (General Fund)	81,942	66,469	148,411
Proceeds of General Obligation Bonds (Bond Fund)	11,560,772	51,961,319	63,522,091
U. S. Government Grants:			
CAL-MTD-2 Project	934,159	3,316,295	4,250,454
CAL-MTD-4 Project	—	12,483	12,483
State of California Grant Fund (excluding expenditures applicable to tube approaches)	284,974	1,589,202	1,874,176
	<u>12,861,847</u>	<u>56,945,768</u>	<u>69,807,615</u>
	<u>\$ 12,929,028</u>	<u>\$ 57,428,332</u>	<u>\$ 70,357,360</u>

SEE ACCOMPANYING NOTES.

NOTES TO FINANCIAL STATEMENTS

June 30, 1965

NOTE A - GENERAL OBLIGATION BONDS

On November 6, 1962, the electors of the member counties of the District approved a measure authorizing the District to incur bonded indebtedness of \$792,000,000 to finance the construction of a rapid transit system. The District levies and collects property taxes for the payment of principal and interest on the bonds. As of June 30, 1965, bonds aggregating \$110,000,000 had been issued; on July 14, 1965, an additional \$70,000,000 due was sold. These bonds mature in varying amounts from 1972 to 1999. Interest on the bonds is payable semi-annually on June 15 and December 15. As of June 30, 1965, funds in the amount of \$3,805,364 were held by the District in its Debt Service Fund for payment of interest. Interest on bonds outstanding in the amount of \$3,190,381 matures December 15, 1965.

NOTE B - U. S. GOVERNMENT GRANTS

Under grant contracts dated June 21, 1963, as amended, and May 19, 1965, the Housing and Home Finance Agency of the U. S. Government is providing financial assistance for projects consisting of developing, testing, and demonstrating new concepts in rapid transit design and operation (CAL-MTD-2) and fare collection (CAL-MTD-4). Federal assistance under these contracts is limited to two-thirds of cost, of which \$5,571,334 had been received as of June 30, 1965, as shown below:

Project	Estimated Cost	Federal Grants	
		Maximum	Received
CAL-MTD-2	\$ 9,329,000	\$6,219,333	\$5,316,667
CAL-MTD-4	1,700,000	1,133,333	254,667
	<u>\$11,029,000</u>	<u>\$7,352,666</u>	<u>\$5,571,334</u>

NOTE C - STATE OF CALIFORNIA GRANT

Pursuant to Sections 30070-30782 of the California Streets and Highway Code, the Department of Public Works of the State of California, in an agreement dated April 6, 1964, as amended, delegated authority and responsibility to the District to construct the San Francisco-Oakland Rapid Transit Tube (subject to specific, subsequent agreements) with State funds (limited to \$33,000,000) and provided \$14,000,000 through December 31, 1965, for engineering work, right of way, utility relocation, and incidental construction. Under Code Section 30778 the District must reimburse the State for costs applicable to the tube approaches (estimated at \$41,000,000) in the amount of \$5,500,000 (including financing costs) annually, commencing December 31, 1971. As of June 30, 1965, the District had received \$6,300,000, of which an estimated \$1,890,000 will be paid for tube approaches.

NOTE D - CONSTRUCTION IN PROGRESS

The estimated cost of the rapid transit system at completion is \$1,001,765,666 (including \$71,200,000 for rolling equipment to be financed by revenue bonds payable solely from operating revenue). It is contemplated that the system will be operational in 1971.

REPORT OF
CERTIFIED PUBLIC ACCOUNTANTS

The Board of Directors
San Francisco Bay Area Rapid Transit
District

We have examined the balance sheet of San Francisco Bay Area Rapid Transit District at June 30, 1965, and the related statements of revenue and expenses and accumulated net revenue, debt service fund, fixed assets, and sources of funds invested in fixed assets for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the statements mentioned above present fairly the financial position of San Francisco Bay Area Rapid Transit District at June 30, 1965, and the results of its operations and sources of funds invested in fixed assets for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ARTHUR YOUNG & COMPANY

San Francisco, California
August 18, 1965

San Francisco Bay Area Rapid Transit District Annual Report





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SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT ANNUAL REPORT

1965
1966

BART ADMINISTRATION BUILDING, OAKLAND



DESIGN CAR, UNION SQUARE, SAN FRANCISCO

DIRECTORS

ALAMEDA COUNTY

Arnold C. Anderson
William S. Godfrey
George M. Silliman, *Vice-President*
Sherwood Swan

CONTRA COSTA COUNTY

Newell B. Case
H. L. Cummings
James P. Doherty
Joseph S. Silva

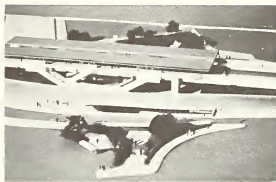
SAN FRANCISCO COUNTY

Allan E. Charles
Adrien J. Falk, *President*
Roger D. Lapham, Jr.
William M. Reedy

STAFF

B. R. Stokes, *General Manager*
L. A. Kimball, *Assistant General Manager*
Richard J. Shephard, *Secretary*
David G. Hammond, *Director, Development and Operations Department*
John M. Peirce, *Director, Finance Department*
T. L. Carlson, *Director, Real Estate and Property Department*
G. L. McDonald, *Director, Public Relations Department*
Wallace L. Kaapcke, *General Counsel*
Warren P. Marsden, *Staff Counsel*
W. E. Benedict, *Director, Administration Department*
G. B. Olsen, *Director, Personnel Department*

TRANSIT STATION DESIGN



MESSAGE FROM THE PRESIDENT

This is the eighth annual report issued by the San Francisco Bay Area Rapid Transit District. No year in the District's history has been more eventful or progressive.

Aside from heightened construction activity there were numerous developments, most of which were favorable. New problems and challenges developed, inevitable in a program as extensive as ours. We are coping with them and are confident all will be solved satisfactorily.

The greatest problems were financial in nature, due principally to cost inflation. Fortunately, the District is receiving new financial assistance from both Federal and State sources. However, restraints must be exercised and economies achieved if we are to complete the system and still maintain its high standards of service. This we definitely intend to do.

The District's problems also have been lessened by early financial planning which included in BART's original bond issue an allotment of fully 20 per cent for inflation and contingencies. While this was virtually an unprecedented allowance for public works projects, subsequent unpredictable events disclosed that it was insufficient.

Every effort is being made to solve the District's remaining problems by careful control of all expenditures and by economic scheduling of construction.

We look forward optimistically toward the day in 1969 when passenger service will begin.

Adrien J. Falk
President, BART

REPORT OF THE GENERAL MANAGER

Fullscale construction of the San Francisco Bay Area's rapid transit project was reached during fiscal 1965-66, with work being carried out at more than a dozen different construction sites throughout the three-county region. Active planning was already underway for the start of system revenue passenger operations in early 1969.

Every phase of the District's program progressed significantly during the fiscal year: All remaining routes and station locations for the basic regional transit network were officially determined; engineering design of the system and its facilities advanced to beyond the 50 per cent point; nearly 60 per cent of the necessary rights-of-way for the system had been acquired, and key administrative and financial planning for the District's future operations was virtually completed.

The greatest activity—and the most gratifying, after more than a decade of preliminary planning—was centered in the construction field. At the close of the year some \$160 million in major construction contracts had been awarded to contractors, and additional contracts totaling almost \$50 million were being prepared for advertising.

In all, more than 20 miles of the 75-mile BART network were under construction. The awarded contracts were for:

THE DIABLO TEST TRACK, a $4\frac{1}{2}$ -mile advance section of the transit network located between Walnut Creek and Concord; *construction 100% completed. Landscaping 100% completed.*

ALBANY, a one-mile length of aerial line extending through the city of Albany; *construction 79% completed.*

BERKELEY HILLS TUNNEL, a $3\frac{1}{2}$ -mile twin-bore tunnel between Oakland and Orinda; *excavation 57% completed.*

EAST OAKLAND, a one-half-mile subway segment linking the District's Southern Alameda County line with downtown Oakland; *construction 23% completed.*

TRANS-BAY TUBE, a four-mile underwater link between San Francisco and Oakland; *construction 3 1/2% completed.*

NORTH OAKLAND, a one-mile segment of aerial line along Grove Street to the Berkeley city limits; *construction underway.*

EL CERRITO, a $2\frac{1}{2}$ -mile aerial segment extending northward through the city of El Cerrito; *construction underway.*

DOWNTOWN OAKLAND, a one-fourth-mile underground link between the northern Broadway subway terminals and the Grove-Shafter Freeway alignment; *construction underway.*

EAST OAKLAND, a two-mile aerial segment from 81st Avenue to the San Leandro city limits; *pre-construction activity underway.*

SAN LEANDRO, a three-mile aerial line segment extending through the city of San Leandro; *pre-construction activity underway.*

DOWNTOWN OAKLAND, a one-half-mile tunnel line connecting the Broadway and 9th Street subway alignments; *pre-construction activity underway.*

At the close of the fiscal year, contracts were to be awarded shortly for six more miles of the system in east and north Oakland.

In January, the Board rejected the lowest of two bids for construction of the downtown Oakland subway segment. The action was taken because of the disparity between the engineers' estimate and the low contract bid, amounting to more than \$13 million.

The bid rejection enabled the District staff to take several direct steps aimed at reducing the effects of cost inflation which has threatened all public works projects in recent months.

What had been a single basic contract, for almost five miles and a half of subway line, including two stations was repackaged into four smaller contracts in order to attract additional competitive bidding by more firms. Also, by altering the specifications to shift certain risks from the contractor to the District, it was possible to achieve other competitive bidding advantages.

FINANCIAL

The District moved to minimize financial problems caused by a combination of factors, including the general trend of inflation aggravated by the war in Vietnam, unforeseen delays in the District's construction program, and the addition of design improvements.

The final adoption of all basic routes and station locations (with the exception of the San Francisco streetcar subway extension) should mean no more local requested alternate route studies, studies which to date have resulted in cumulative delays of more than a year in the original BART construction schedule, as well as major extra costs.

Despite the unprecedented allowances made for inflation and contingencies in its original financing program, the District faces a projected deficiency of approximately \$150 million if the existing inflationary trends continue until the system is completed in 1971. This anticipated figure was verified by a completely new cost re-estimate ordered by the District to measure the project's present financial status in the light of completed and projected design and construction costs.

The projected deficit was initially reported to the Board of Directors early in January at the time of the

Alameda subway bid rejection. It was confirmed also by California State Legislative Analyst A. Alan Post, who early this year made his own appraisal of the District's financial situation in connection with pending legislation concerning the Trans-Bay Tube.

The District apparently will require approximately \$42 million to construct the basic rapid transit system, of which a \$792-million general obligation bond issue was approved by the voters of Alameda, Contra Costa and San Francisco counties in 1962. The other major capital financing requirement — for increased construction costs on the Trans-Bay underwater rapid transit tube — has been assured through an increase from \$133 million to \$180 million in the amount of state toll bridge revenues, authorized for this purpose by the California Legislature during the year.

More than half of the projected \$150 million deficiency will be acquired from Federal funds, by virtue of assurances received late in the fiscal year from Secretary Robert C. Weaver of the U. S. Housing and Urban Development Department. Dr. Weaver said that the District could expect to receive \$80 million in capital Federal grants over the next five years, assuming reasonable appropriations by Congress under terms of a new mass transit aid bill.

In addition the District, through normal short-term reinvestment of its bond funds, expects to attain up to \$5 million in interest proceeds.

Further, plans are now underway to defer certain portions of the construction program that are not essential to insure the promised level of passenger service during the early years of operation.

Neither the projected overrun nor the means ultimately adopted to meet it have in any way diminished the confidence of the District in its ability to construct the truly modern, high-speed rapid transit system approved by the electorate.

DESIGN

At the fiscal year closed, final major engineering decisions were about to be made with respect to design specifications for rapid transit operating equipment. The testing of four experimental automatic train control systems — each developed by a different U. S. manufacturer — was completed in February at the Diablo Test Track. Final contract specifications for the train control system were due to be advertised in late 1966.

The schedule calls for the placement of production orders for the District's transit cars early in 1967. Specifications for the cars — to incorporate equipment designs from the Test Track program and the car body design already selected under a separate development program — will be advertised in the next several months.

Because of its importance to the entire transit industry, an additional Federal grant of \$800,000 was awarded to the District by the Department of Housing and Urban Development to finance extension of certain phases of its Test Track program for another year, primarily in the fields of roadbed design and noise control.

More than 15 of the Bay Region's outstanding architectural firms are currently engaged in designing most

of the 37 passenger stations to be situated on the rapid transit network — probably the most comprehensive design effort ever undertaken for any public works project.

The District's first major landscaping contract was completed during the fiscal year, under which the entire 4½-mile length of the Diablo Test Track was attractively landscaped with trees, grass and shrubbery. This initial project has stimulated widespread commendation on the District's insistence that the transit system must be a pleasure to look at as well as to ride on.

The landscaping program received a tremendous impetus at the end of the fiscal year with the announcement that the District had been granted \$447,000 in Federal funds to further demonstrate the community value of landscaping in the cities of Albany and El Cerrito. The funds, comprising the first such grant under the new national urban beautification program of the U. S. Department of Housing and Urban Development, will be used to develop an attractive linear park along a three-mile length of the aerial line through the two cities.

A key element of the entire design program is the full-scale model of BART's transit car, which has been displayed at numerous cities throughout the three-county District. During the model's initial tour more than 150,000 persons viewed the car, and plans were underway for a similar tour beginning in July, 1966. Objective of the tour program is to acquaint Bay Area residents with the type of transit service they will begin enjoying in 1969.

In a major policy decision affecting design, the Board of Directors — after recommendations by the District's architectural, advertising and industrial design consultants — adopted provisions establishing an advertising policy for the rapid transit system. It would encourage desirable advertising in certain specified areas. Communities also are encouraged to enact ordinances limiting unattractive displays along the transit right-of-way.

TRANSIT COORDINATION

Vital also to the BART system's future success is the coordination study being carried out by the District and the two existing public transit agencies: the San Francisco Municipal Railway and the Alameda-Contra Costa Transit District. This study, financed by Federal demonstration grants, will be concluded this fall. The Northern California Transit Demonstration Project's purpose is to develop plans for completely coordinating all three transit facilities, including recommendations for location of suitable feeder routes, methods for handling passenger transfers, apportioning of revenues, and even future equipment acquisition.

As the year closed, San Francisco city officials had already approved the placing of a \$96.5 million general obligation bond issue on the local election ballot this November to finance the first phase of a complete modernization of the Municipal Railway in accordance with the NCTD study's initial recommendation.

FUTURE PLANNING

To prepare for accelerated construction, the District is planning to market four additional blocks of bonds from its \$792 million general obligation bond issue authoriza-

tion during the 1966-67 fiscal year. The fourth block of Series D bonds, totaling \$70 million, was sold last November at a net interest rate of 3.59%. Plans were underway as the fiscal year closed to market the District's revenue bonds which will finance the purchase of all BART rolling stock.

In another area the District moved decisively to implement its official civil rights policies. Strict fair employment provisions, formulated in consultation with the California State Fair Employment Practices Commission, were included in all construction contracts awarded by the District. In addition, the staff instituted a community relations program which involved the arranging of continuous meetings with all interested civil rights groups in an effort to insure fair employment practices. Special meetings also were arranged, under District auspices, between key civil rights leaders and representatives of construction contractors and labor unions which will be involved in the BART project. Finally, the District obtained passage of a State legislative measure which authorizes payment of relocation expenses to persons and firms dislocated by BART's land acquisition program.

Administratively, the District has made significant progress toward planning its step-by-step transition through the successive stages of engineering, construction and then full-scale passenger operations. Key personnel have been added to the District's staff to form the nucleus of each future operating department. During the fiscal year, the District's Department of Development and Operations was organized to reflect the growing emphasis on construction management and operations planning. A completely new Personnel Department and a Staff Counsel's office were established, and key planning is currently underway for the preparation of job specifications and training manuals for the personnel who will soon be recruited to operate the BART network.

During the fiscal year, three new members were appointed to the Board of Directors. They were James P. Doherty of El Cerrito and Joseph S. Silva of Brentwood, named as representatives from Contra Costa County, and Mayor William S. Godfrey of Alameda, representing Alameda County. Mr. Doherty filled Contra Costa County's new seat on the Board, recently created by action of the California Legislature.

Adrien J. Falk of San Francisco was elected to his seventh term as President of the Board, and George Silliman of Alameda County was elected Vice-President, to succeed Felix F. Chialvo of Oakland, who resigned from the Board.

This report is respectfully submitted to the Board of Directors pursuant to Section 28834 (e) of the Public Utilities Code.



FERRY SLIP REMOVAL, SAN FRANCISCO

B. R. Stokes

B. R. Stokes
General Manager

UTILITY RELOCATION, SAN FRANCISCO

THE THRUST OF CONSTRUCTION

After 10 years of planning and design, nearly 1000 workers are engaged in construction along the Bay Area Rapid Transit District's 75-mile network. More than 20 miles of the rail system have been placed under contract as the period of peak construction nears. In a San Francisco shipyard, giant segments of the four-mile-long Trans-Bay Tube are being fabricated. Fifty-seven sections, each the size of a small freighter, will be needed to complete the tube, vital link between Oakland and San Francisco. Ferry slips are being removed on the San Francisco shore . . .

CAISSON CONSTRUCTION, SAN FRANCISCO



SUBWAY EXCAVATION, OAKLAND

CEMENT POUR, OAKLAND SUBWAY



... An earthen dike is extending from Oakland to accommodate the tube's land connections. Underground utility structures are being relocated in the cities serviced by BART subways. The first subway west of the Mississippi is moving ahead in Oakland, with another subway segment about to start in San Francisco ...



TEMPORARY GAS LINE, OAKLAND SUBWAY

CUT-AND-COVER EXCAVATION, OAKLAND SUBWAY





PORTAL, OAKLAND SUBWAY

... Tunnel crews are driving deeper into the Berkeley Hills, where BART's three-mile, twin-bore tunnel between Contra Costa and Alameda Counties is 57 per cent excavated ...

BERKELEY HILLS TUNNEL





In four locations, BART and the Division of Highways have initiated joint use of existing transportation corridors to accommodate transit rails and freeway lanes.

Elsewhere in the system, aerial lines are rising in Albany and El Cerrito, where an ambitious landscaping program to provide a linear park beneath the aerial structure will be Federally funded.

WORK TRAIN, BERKELEY HILLS TUNNEL



TUNNEL FACE, OAKLAND PORTAL

EARTH WORK, ORINDA CROSSROADS



SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

BALANCE SHEET

June 30, 1966

ASSETS

Current assets:		
Cash (including time deposits of \$109,800,000) . . .		\$113,686,802
U. S. Treasury bills, at cost		15,608,369
Miscellaneous receivables		1,703,381
Total current assets		<u>130,998,552</u>
Construction in progress— Note D		158,374,450
Other assets:		
Debt Service Fund assets		
(Including cash of \$7,984,792) — Note A	\$ 8,141,600	
Contract deposit with State of California		
(U. S. Treasury bonds)	2,596,750	
Office furniture and equipment	200,990	
		<u>10,939,340</u>
		<u><u>\$300,312,342</u></u>

LIABILITIES AND CAPITALIZATION

Current liabilities:		
Construction contracts	\$ 5,182,423	
Other	342,743	
Total current liabilities		<u>5,525,166</u>
Other liabilities:		
Withheld from contractors on progress payments	\$ 2,031,433	
Due to State of California — Note C	5,492,400	
		<u>7,523,833</u>
Debt Service Fund — Note A		8,141,600
Capitalization:		
Construction funds:		
General Obligation Bonds		
(\$792,000,000 authorized to be issued,		
\$250,000,000 issued and outstanding) — Note A	250,000,000	
U. S. Government Grants — Note B	6,781,513	
State of California Grant — Note C	12,815,600	
		<u>269,597,113</u>
Accumulated net revenue	8,199,063	
Total construction funds	277,796,176	
General Fund accumulated net revenue	1,825,567	
		<u>279,121,743</u>
		<u><u>\$300,312,342</u></u>

(See notes to financial statements.)

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

STATEMENT OF REVENUE, EXPENSES AND ACCUMULATED NET REVENUE

Fiscal Year Ended June 30, 1966

	Construction Funds	General Fund
Revenue:		
Taxes		\$2,355,803
Interest	\$5,647,821	50,352
Other	35,921	17,641
	<u>5,683,742</u>	<u>2,423,796</u>
Expenses:		
Personal services		1,727,614
Professional and specialized services	68,160	332,485
Rent, leased vehicles, and office expense		270,587
Bond issuance expense	56,795	
Travel expense		48,099
Other	16,705	105,855
		<u>2,484,640</u>
Less charged to Construction in Progress		517,782
	<u>141,660</u>	<u>1,966,858</u>
Excess of revenue over expenses	5,542,082	456,938
Accumulated net revenue at beginning of year	2,656,981	868,629
Accumulated net revenue at end of year	<u>\$8,199,063</u>	<u>\$1,325,567</u>

DEBT SERVICE FUND

Fiscal Year Ended June 30, 1966

Revenue:	
Taxes	\$11,370,280
Interest	273,371
Other	36,985
	<u>11,680,636</u>
Less matured interest	7,344,400
	<u>4,336,236</u>
Balance at beginning of year	3,805,364
Balance at end of year — Note A	<u>\$ 8,141,600</u>

(See notes to financial statements.)

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

NOTES TO FINANCIAL STATEMENTS

June 30, 1966

NOTE A - GENERAL OBLIGATION BONDS

On November 6, 1962, the electors of the member counties of the District approved a measure authorizing the District to incur a bonded indebtedness of \$792,000,000 to finance the construction of a rapid transit system. The District levies and collects property taxes for the payment of principal and interest on the bonds. As of June 30, 1966, bonds aggregating \$250,000,000 had been issued. These bonds mature in varying amounts from 1972 to 1999. Interest on the bonds is payable semi-annually on June 15 and December 15. As of June 30, 1966, funds in the amount of \$8,141,600 were held by the District in its Debt Service Fund for payment of interest, of which \$4,498,675 is payable December 15, 1966.

NOTE B - U. S. GOVERNMENT GRANTS

Under grant contracts dated June 21, 1963 (as amended), May 19, 1965, and July 5, 1966, the Department of Housing and Urban Development of the U. S. Government is providing financial assistance for projects consisting of developing, testing and demonstrating new concepts in rapid transit design and operation (CAL-MTD-2), in fare collection (CAL-MTD-4), and in demonstrating new and improved concepts in rapid transit hardware and operations (CAL-MTD-7). Federal assistance under these contracts is limited to two thirds of cost. Following is a summary of the grants (excluding interest revenue) as of June 30, 1966:

PROJECT	ESTIMATED COST	FEDERAL GRANTS	
		MAXIMUM	RECEIVED
CAL-MTD-2	\$ 9,329,000	\$6,219,333	\$6,081,886
CAL-MTD-4	1,700,000	1,133,333	699,627
CAL-MTD-7	1,200,000	800,000	-
	<u>\$12,229,000</u>	<u>\$8,152,666</u>	<u>\$6,781,513</u>

NOTE C - STATE OF CALIFORNIA GRANT

Pursuant to Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California, in agreements dated April 6, 1964 (as amended) and March 3, 1966, delegated authority and responsibility to the District to construct the San Francisco-Oakland Rapid Transit Tube. Under Code Section 30778 the District must reimburse the State for costs applicable to the tube approaches in the amount of \$2,500,000 (including financing costs) annually, commencing December 31, 1971. As of June 30, 1966, the District had received \$18,308,000, of which an estimated \$5,492,400 will be used for tube approaches.

NOTE D - CONSTRUCTION IN PROGRESS

During the latter half of fiscal year 1965/1966 a re-estimate of project costs, based upon information available at that time, was initiated to obtain the estimated cost of the rapid transit system at completion. This estimate amounted to \$1,208,646,000 (including \$71,200,000 for rolling equipment to be financed by revenue bonds payable solely from operating revenue). Presently, the ultimate cost of the system cannot be finally determined, as future economic conditions and possible changes in plans to accomplish cost reductions may have a significant effect on the final cost of the system. It is contemplated that the system will be operational in 1971.

REPORT OF CERTIFIED PUBLIC ACCOUNTANTS

The Board of Directors
San Francisco Bay Area Rapid Transit District

We have examined the accompanying balance sheet of the San Francisco Bay Area Rapid Transit District at June 30, 1966, the related statements of revenue, expenses, and accumulated net revenue, and debt service fund for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the statements mentioned above present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1966, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Arthur Young & Company

San Francisco, California
August 17, 1966

ba

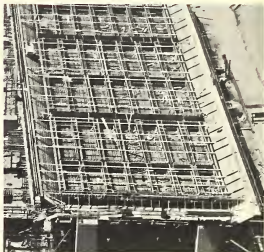
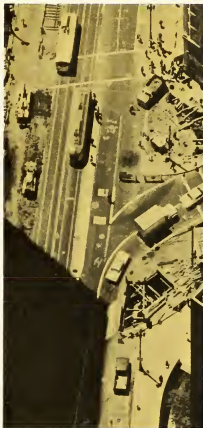
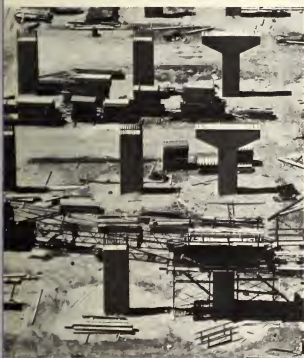
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BAY AREA
RAPID TRANSIT
DISTRICT**

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ANNUAL REPORT 1966/1967



Wooden decking provides the street surface over the Bay Area Rapid Transit's central Berkeley Station, where construction has been underway for more than a year. The clear-span structure, built under a relocated park, is one of three subway stations in Berkeley.



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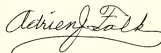
MESSAGE FROM THE PRESIDENT

Fiscal 1966-67 was the fifteenth year of development for the Bay Area's Rapid Transit system—dating from the start of preliminary transportation studies in 1951. In many ways it was the most significant.

While previous years were typified largely by planning and engineering, and the securing of public support, this was the period in which the entire regional transit system began to take physical shape. The posing of new financial problems—though they also are significant—did not slow the pace of construction.

At the close of the fiscal year more than 2,000 workers, employed by 100 separate contracting and subcontracting firms, were actively engaged in construction of the system at 30 sites throughout the region. In numerous communities new public and private development projects costing many millions of dollars were launched as a direct consequence of the BART project.

We are confident that, with unified support of the region's community leaders and legislative representatives now reasonably assured, the matter of insufficient funding will be solved—just as problems of equal magnitude have been solved in earlier years of the development program.



Adrien J. Falk
President



REPORT OF THE GENERAL MANAGER

Construction of the Bay Area rail rapid transit system became apparent for the first time during fiscal year 1966-67 to residents in all three counties of Alameda, Contra Costa and San Francisco. By July, 1967, some 44 miles of the 75-mile network were under contract.

Among the year's major accomplishments:

- Placing of 23 additional miles of line under construction.
- Contracting for production of the network's automatic train control and communications system.
- Completion of design specifications for the District's first 250 transit cars.
- Acquisition of 675 additional parcels of land for the network's right-of-way, raising total acquisitions thus far to 78 per cent.
- Development of operation and maintenance procedures for the rapid transit system.
- Completion of the District's basic test track program, and launching of further refined equipment evaluations at the Diablo Test Track.
- Inauguration of plans for operating staff recruitment and training.
- Marketing of an additional \$120 million in bonds from the District's voter-approved \$792 million general obligation bond issue.
- Securing of \$26 million in federal construction funds.

While these accomplishments reflected marked progress toward development of the rapid transit system, the District also encountered various new problems.

The dominant problem still to be solved was the need for additional funds to assure completion of the entire project.

When the District's electorate approved the general obligation bond issue in 1962, it was estimated that the capital cost of the system, including the Trans-Bay transit tube, would be \$923,213,000. This included an allowance of \$222,113,000 to cover inflation and contingencies.

Automobile traffic has been removed from portions of Market Street in San Francisco to permit BART construction at the Montgomery, Powell and Civic Center Stations. Several retail and financial buildings along Market Street, such as the 43-story Wells Fargo Building, already have planned private entrances to BART stations.



A spectacular "dig-in," involving 125 San Francisco school children, was held this summer to mark the start of Bay Area Rapid Transit construction on San Francisco's Market Street.

Rapid transit trains will occupy single rights-of-way with the California State Division of Highways; in the upper view, BART's MacArthur Station is shown under construction in the center of the photograph, flanked by lanes of the new Grove-Shafter freeway in Oakland. In the lower view, aerial structures are shown at BART's San Leandro Station site.





nearly 2,500 construction workers were engaged at approximately 30 different sites throughout the three-county area. Total progress:

- Oakland—15 miles of transit line under construction; nine new segments begun.
- Central Contra Costa County—10 miles completed or under construction; one new segment.
- San Leandro-Hayward—6½ miles under construction; two new segments.
- San Francisco—4 miles under construction; eight new segments.
- Berkeley—1½ miles under construction; three new segments.
- Albany-El Cerrito—3½ miles completed or under construction.
- Trans-Bay Tube—3½ miles under construction.

Additional contracts for five more miles of transit line were ready to be awarded at the close of the year, and several other contracts had been advertised for construction bids. Overall design of the rapid transit system and its facilities had progressed to beyond the 75 per cent point. Some 2,822 of the 3,500 parcels of land necessary for the network's right-of-way had been acquired by the District real estate department.

As the project advanced, increasing emphasis was given to the visual design aspects of the system. The District Board of Directors, in order to exercise closer supervision over architectural phases of the project, retained as its special consultant the former Dean of Humanities at the Massachusetts Institute of Technology, John E. Burchard, who more recently had served as Acting Dean of the University of California School of Environmental Design.

His appointment followed the resignations of the District's architectural and landscape design consultants. In addition, the District employed a staff architect to review the visual design aspects of plans and specifications prepared by the many architects who are designing individual transit stations and landscaping projects.

Operational planning was intensified through the addition of staff technical specialists to prepare for the scheduled start of passenger service on the regional transit network. Production specifications were completed for the District's first order of 250 transit vehicles. Also nearing completion were specifications for the system's automatic fare collection equipment.

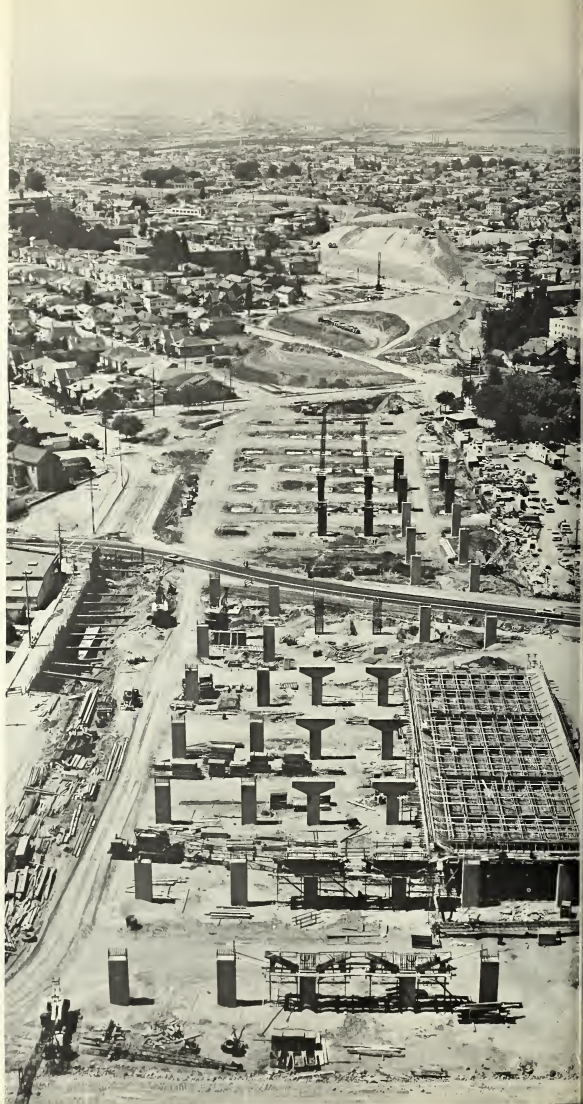
Detailed design work already was underway on the automatic train control and communications system, for which a production contract was awarded.

Public relations activities of the District were aimed at three principal objectives: Easing the burden of construction activity on local communities, maintaining an adequate flow of public information concerning all phases of the rapid transit project, and developing a public awareness of the future importance of rapid transit service to the entire region.

Administratively, the District initiated various actions aimed at implementing its fair employment policies. Close liaison was continued with civil rights organizations to insure maximum development of employment opportunities for minority workers. A District-sponsored affirmative action program, devised through joint effort with construction contractors, Federal officials and building trades unions, has succeeded in broadening such training and employment opportunities on several construction sites.

The District also initiated a program for the provision of relocation assistance to occupants of property affected by the rapid transit project—in





accordance with new BART-sponsored State legislation and Federal grant requirements.

The District's coordinated insurance program continued to demonstrate its effectiveness during the fiscal year. A report submitted by Transit Insurance Administrators indicated that the program thus far produced an estimated \$1,164,121 in insurance premium savings.

The impact of the rapid transit project on the economy of the Bay Area became dramatically apparent with the heightened construction activity in communities along the transit route. Various public and private projects have been launched, including construction of numerous office buildings and residential developments. More than 15 firms in downtown San Francisco, Oakland and Berkeley are planning special underground entrances to connect with the transit subway stations. City and county agencies have launched other new projects to capitalize on public development opportunities adjacent to the rapid transit system.

Nearing completion at the end of the fiscal year was a joint study, co-sponsored by the Federal government, which would develop plans for coordinating operation of the regional BART network with the San Francisco Municipal Railway and the Alameda-Contra Costa Transit District.

In December, 1966, the Board elected Adrien J. Falk to his eighth consecutive term as President of the Bay Area Rapid Transit District, and it elected James P. Doherty Vice-President, succeeding George M. Silliman.

This report is respectfully submitted to the Board of Directors pursuant to Section 28834 (e) of the Public Utilities Code.

B. R. Stokes

B. R. Stokes
General Manager

Bay Area Rapid Transit's Rockridge Station in North Oakland occupies the median strip of the Grove-Shafter freeway near the intersection of College and Shafter Avenues. Parking for 550 cars at the station will be accommodated beneath the freeway structures, shown under construction at the station site.

A 4-mile tube beneath San Francisco Bay and a 3 1/2-mile tunnel through the Berkeley Hills are perhaps the two most important links in the BART network. At right, workmen are shown moments after the Berkeley Hills Tunnel was "holed through." At left, a section of the Trans-Bay Tube linking Oakland and San Francisco is shown in position on the floor of the bay. Fifty-seven sections will be necessary to complete the tube.



SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

BALANCE SHEET

June 30, 1967

ASSETS

Current assets:	
Cash (including time deposits of \$108,000,000)	\$110,370,514
U.S. Treasury bills, at cost	15,124,905
Miscellaneous receivables	1,013,756
Total current assets	126,509,175
Construction in progress—NOTE D	313,652,886
Debt Service Fund assets—NOTE A (including cash of \$15,290,018)	15,557,129
Contract Guaranty and Other Deposits (principally U.S. Government securities)	12,574,441
Office Furniture and Fixtures, at cost	258,193
	<u>\$468,551,824</u>

LIABILITIES AND CAPITALIZATION

Current liabilities:		
Construction contracts	\$	7,853,568
Other		364,402
Total current liabilities		8,217,970
Other liabilities:		
Withheld from contractors on progress payments		6,612,049
Payable to State of California—NOTE C		12,342,450
Debt Service Fund—NOTE A		15,557,129
Capitalization:		
Construction funds:		
General Obligation Bonds (\$812,500,000 authorized to be issued, including \$20,500,000 for Special Service District No. 1: \$370,000,000 issued and outstanding)—NOTE A	\$370,000,000	
U.S. Government Grants—NOTE B	10,793,412	
State of California Grant—NOTE C	28,799,050	
	<u>409,592,462</u>	
Accumulated net revenue	14,614,721	
Total construction funds	424,207,183	
General Fund accumulated net revenue	1,615,043	425,822,226
		<u>\$468,551,824</u>

(See notes to financial statements)

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

STATEMENT OF REVENUE, EXPENSES AND ACCUMULATED NET REVENUE

Fiscal Year Ended June 30, 1967

	CONSTRUCTION FUNDS	GENERAL FUND
Revenue:		
Taxes		\$2,490,375
Interest	\$ 6,582,384	50,801
Other	44,953	186
	<u>6,627,337</u>	<u>2,541,362</u>
Expenses:		
Personal services		2,242,316
Professional and specialized services	87,596	404,977
Rent, leased vehicles, and office expenses		325,695
Bond issuance expense	103,696	
Travel expense		59,344
Other	20,387	81,471
		<u>3,113,803</u>
Less charges to Construction in Progress		861,917
	<u>211,679</u>	<u>2,251,886</u>
Excess of revenue over expenses	6,415,658	289,476
Accumulated net revenue at beginning of year	8,199,063	1,325,567
Accumulated net revenue at end of year	<u>\$14,614,721</u>	<u>\$ 1,615,043</u>

Debt Service Fund

Revenue:	
Taxes	\$17,620,608
Interest	615,128
	18,235,736
Less matured interest	10,820,207
	<u>7,415,529</u>
Balance at beginning of year	8,141,600
Balance at end of year	<u>\$15,557,129</u>

(See notes to financial statements)

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

NOTES TO FINANCIAL STATEMENTS

June 30, 1967

NOTE A—GENERAL OBLIGATION BONDS

The District is authorized to issue \$792,000,000 of General Obligation Bonds of which \$370,000,000 were outstanding at June 30, 1967, with principal maturities from 1972 to 1999. Payment of both principal and interest on these bonds is provided by the levy of District-wide property taxes. In July, 1967, proceeds were received from the sale of an additional \$70,000,000 of General Obligation Bonds. In addition the electorate of Special Service District No. 1, formed to provide for construction of border-to-border subway within the City of Berkeley, authorized the issuance of \$20,500,000 of General Obligation Bonds guaranteed by property within that city. No Special Service District No. 1 Bonds were outstanding at June 30, 1967.

Bond interest is payable semiannually on June 15 and December 15 from the Debt Service Fund. The composite interest rate on bonds presently outstanding is 3.65%.

NOTE B—U. S. GOVERNMENT GRANTS

Under grant contracts the U. S. Department of Housing and Urban Development is providing financial assistance for research, beautification, and construction projects. The following grant contracts were in force as of June 30, 1967:

Project - Purpose	Estimated Cost	Maximum Grant	Funds Received
CAL-MTD- 2 Transit Design	\$ 9,329,000	\$ 6,219,333	\$ 6,081,886
CAL-MTD- 4 Fare Collection	1,700,000	1,133,333	947,756
CAL-MTD- 7 Transit Hardware	1,200,000	800,000	365,770
CAL-BD - 1 Beautification	497,725	447,953	—0—
Demonstration Grants		8,600,619	7,395,412
CAL-UTG- 6 Construction	34,098,000	13,100,000	2,295,000
CAL-UTG-11 Construction	45,204,850	13,200,000	1,103,000
Capital Grants		26,300,000	3,398,000
Total	<u>\$92,029,575</u>	<u>\$34,900,619</u>	<u>\$10,793,412</u>

NOTE C—STATE OF CALIFORNIA GRANT

Pursuant to Sections 30770-30782 of the California Streets and Highways Code the Department of Public Works of the State of California has authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. Under Code Section 30778 the District must reimburse the State for costs applicable to the tube approaches in the amount of \$2,500,000 annually, commencing December 31, 1971. As of June 30, 1967 the District had received \$41,141,500 of which \$12,342,450 has been allocated to tube approaches.

NOTE D—CONSTRUCTION IN PROGRESS

In mid-1966 a re-estimate of project costs, based upon information then available, was initiated to determine the estimated cost of the rapid transit system at completion. This estimate, as currently revised, amounts to \$1,238,480,000 (including \$179,878,000 for the trans-bay tube to be financed by the State of California and \$72,875,000 for transit vehicles to be financed by revenue bonds payable solely from operating revenue). Presently, the ultimate cost of the system cannot be finally determined, as future economic conditions and possible changes in schedule to match fund availability may have a significant effect on the final cost of the system. It is contemplated that the system will be operational in 1971.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors of the
San Francisco Bay Area Rapid Transit District

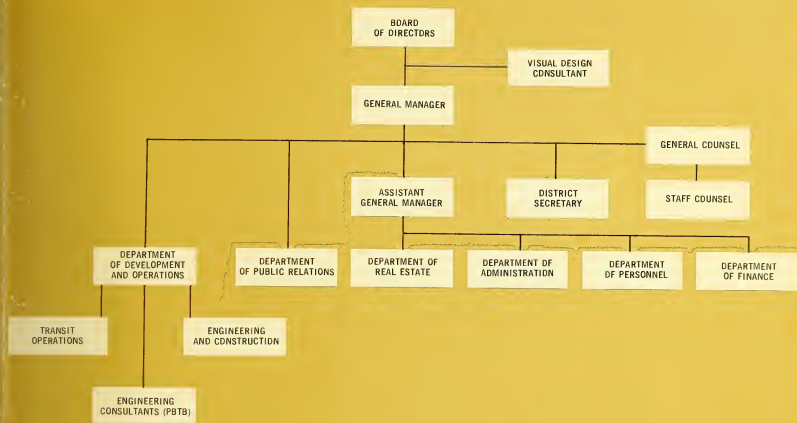
In our opinion, the accompanying balance sheet and the related statements of revenue, expenses and accumulated net revenue and debt service fund present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1967, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse & Co.

Price Waterhouse & Co.

San Francisco, California
September 19, 1967

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT



BART DESIGN ORGANIZATION

PARSONS BRINCKERHOFF-TUDOR-BECHTEL,
ENGINEERING CONSULTANTS

VISUAL DESIGN CONSULTANT - JOHN E. BURCHARD

INDUSTRIAL DESIGN, VEHICLE DESIGN - SUNDBERG-FERAR, INC.

GRAPHICS DESIGN - ERNEST BORN

STATIONS

ARCHITECTS

LANDSCAPE ARCHITECTS

19TH STREET OAKLAND
12TH STREET OAKLAND
DALY CITY

McCUE BODNE TOMSICK

THEDDRE OSMUNDSON

CDCORD
PLEASANT HILL
WALNUT CREEK
LAFAYETTE
ORINDA
SAN LEANDRO
BAY FAIR

MASTEN & HURD/JOSEPH ESHERICK

ANTHONY GUZZARDO

CIVIC CENTER

REID AND TARICIS

MONTGOMERY STREET
POWELL STREET

SKIDMORE OWINGS & MERRILL

16TH STREET MISSION
24TH STREET MISSION

HERTZKA & KNOWLES

THEDDRE OSMUNDSON

GLEN PARK
BALBOA PARK

CORLETT & SPACKMAN/ERNEST BORN

DOUGLAS BAYLIS

RICHMOND
BERKELEY
ASHBY PLACE
MacARTHUR
ROCKRIDGE

MAHER & MARTENS

RDYSTON, HANAMOTO
& MAYES

NORTH BERKELEY
OAKLAND WEST
SOUTH HAYWARD
UNION CITY
FREMONT

KITCHEN & HUNT

RDYSTON, HANAMOTO
& MAYES
ROBERT KITCHEN

EL CERRITO DEL NORTE
EL CERRITO PLAZA

DeMARS & WELLS

SASAKI, WALKER ASSOC.

LAKE MERRITT

GARDNER A. DAILEY & ASSOCIATES

JACK C. STAFFORD

FRUITVALE
COLISEUM

REYNOLDS & CHAMBERLAIN/NEILL SMITH

ANTHONY GUZZARDO

HAYWARD

WURSTER, BERNARDI & EMMONS

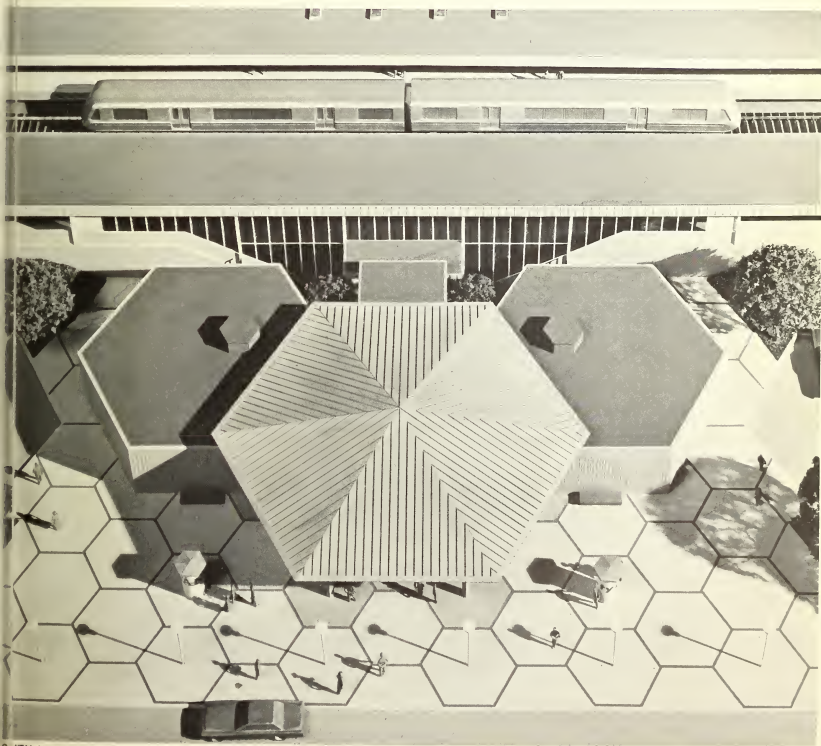
RALPH JONES



ANNUAL REPORT **SAN FRANCISCO**
1967-1968 **BAY AREA**
RAPID TRANSIT
DISTRICT

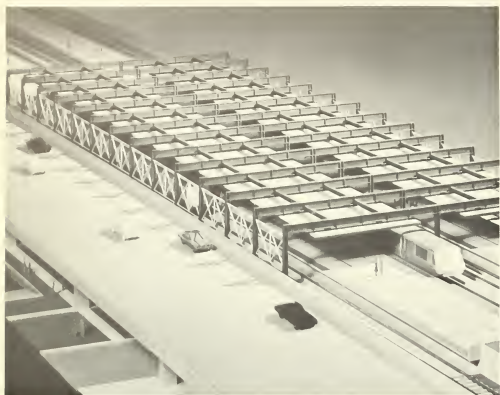
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SAN FRANCISCO
PUBLIC LIBRARY



SOUTH HAYWARD STATION, Kitchen & Hunt

ENVIRONMENTAL 'FIT' OF EACH RAPID TRANSIT STATION TO ITS COMMUNITY
HAS GUIDED ARCHITECTURAL THRUST OF BART FINAL DESIGN



MacARTHUR STATION. Maher & Martens



16th STREET MISSION STATION. Hertzka & Knowles



HAYWARD STATION. Wurster, Bernardi & Emmerich

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

DIRECTORS

ALAMEDA COUNTY

ARNOLD C. ANDERSON
Vice-President

WALLACE J. S. JOHNSON

H. R. LANGE

GEORGE M. SILLIMAN

CONTRA COSTA COUNTY

H. L. CUMMINGS

JAMES P. DOHERTY
President

STANLEY T. GRDYDK

JOSEPH S. SILVA

CITY & COUNTY OF SAN FRANCISCO

RICHARD A. BANCROFT

ADRIEN J. FALK

GARLAND D. GRAVES

WILLIAM M. REEDY

STAFF

B. R. STOKES
General Manager

L. A. KIMBALL
Assistant General Manager

RICHARD J. SHEPHARD
Secretary

JOHN M. PEIRCE
Director of Finance—Treasurer

DAVID G. HAMMOND
*Director of
Development & Operations*

WALLACE L. KAAPCKE
General Counsel

ROBERT W. NELSON
Controller

WARREN P. MARSDEN
Staff Counsel

GEORGE L. McDONALD
Director of Public Relations

WM. E. BENEDICT
Director of Administration

T. L. CARLSON
Director of Real Estate

G. B. OLSEN
Director of Personnel



ARNOLD C. ANDERSON



RICHARD A. BANCROFT



H. L. CUMMINGS



JAMES P. DOHERTY



ADRIEN J. FALK



GARLAND D. GRAVES



STANLEY T. GRDYDK



WALLACE J. S. JOHNSON



H. R. LANGE



WILLIAM M. REEDY



GEORGE M. SILLIMAN



JOSEPH S. SILVA

MESSAGE FROM THE PRESIDENT

The most inspiring aspect of the rapid transit project is its growing impact on Bay Area development. Countless new local projects — both public and private — are being launched throughout the region as a result of the transit construction.

On June 4, 1968, the residents of San Francisco approved a \$24.5 million bond issue to finance the beautification of Market Street in conjunction with BART's subway development. The city also agreed to pay for construction of an additional subway station, for which downtown property owners are underwriting the initial design costs.

The same businessmen are erecting 26 new office buildings in downtown San Francisco at a cost of \$380 million — and have announced plans for other new private investment projects totaling \$487 million.

Commercial development is occurring, as well, in downtown Oakland and Berkeley; and BART-related landscape beautification and street improvement programs are underway in Albany, El Cerrito, San Leandro, Walnut Creek, Hayward and other suburban communities. Numerous department stores and office buildings also are financing development of special underground entrances to BART's subway stations.

Such community activity is tangible evidence of the public's faith and confidence in the Bay Area Rapid Transit project.

James P. Doherty
JAMES P. DOHERTY
President

Reinforcing steel at the train level of the 24th Street Mission Station in San Francisco is being erected prior to the concrete pour. More than 4500 workers are now taking part in construction of BART's 75-mile rail network.



REPORT OF THE GENERAL MANAGER

Fiscal 1967-68 was a year of materialization for the San Francisco Bay Area Rapid Transit project. By the close of the year, nearly 40 miles of basic track structures for the 75-mile rail network were in place throughout Alameda, Contra Costa and San Francisco Counties.

The structures included 8 miles of completed subway and tunnel excavation, 18 miles of erected aerial lines, 11 miles of developed surface roadbed, and two miles of connected underwater trans-bay tube.

In addition, construction was underway on other segments of the system totaling 20 miles.

As of June 30, 1968, the total amount of awarded construction and procurement contracts exceeded \$590 million, and construction employment on the BART project had risen to 4,500 persons. The workers represented more than 100 contracting and subcontracting firms.

Progress on major phases of the project was as follows:

- ☐ Design engineering completed 88%
- ☐ Right-of-way acquired 87%
- ☐ Utility work accomplished 70%
- ☐ Construction completed 33%

Best demonstrating the physical emergence of the rapid transit system is the fact that—except for the ordering of transit vehicles—the District has already awarded all major contracts necessary to permit the start of operation of its southern Alameda County line between Oakland and south Hayward.

Contracts recently were awarded for electrification and trackwork on the initial 19-mile segment of transit line, and also for architectural completion of six southern Alameda County passenger stations.

Installation of cable for the BART automatic train control and communications system was about to begin as the fiscal year ended.

Because of its existing capital fund deficiency, the District was unable to place a contemplated production order for its initial 250 transit vehicles—even though the car design specifications had been advertised to prospective manufacturers nearly a year earlier. Marketing of revenue bonds to finance the purchase of vehicles must be delayed until there is sufficient capital funding to assure construction of the entire system.

The District Board of Directors early in the fiscal year adopted a policy resolution specifying that no portion of the BART network would be placed in operation until funding for the entire system is assured.

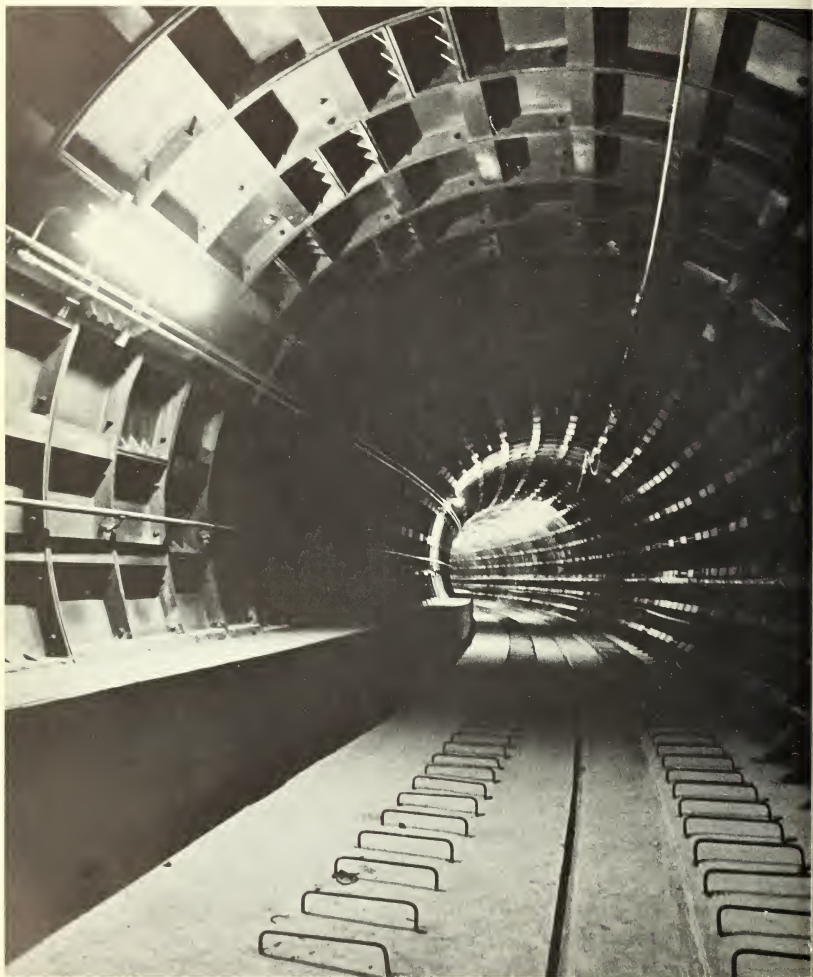
In order to award all remaining construction contracts, an additional \$144 million will be required—due to previous construction delays, cost inflation, and improvements added to the system's design. The extra funds would augment BART's available project funding, which totals slightly over \$1 billion.

The California Legislature, at the close of the fiscal period, was considering several proposed measures



Skilled personnel at BART's Transit Compressed Air Medical Center examine all tunnelers working under increased air pressure in subway construction. Medical locks act as test chambers for new workers, and are utilized for treatment of decompression illness.

Completed tunneling describes a curve as it leaves the 12th Street Oakland Station beneath Broadway and proceeds toward the Lake Merritt Station. Twenty-one miles of the 75-mile system will be in subway structures.



that would provide the necessary financial assistance—backed by strong support from most Bay Area legislators and community leaders.

The need for additional funds, however, did not slow either the pace of construction on the project, or the planning of future system operations.

CONSTRUCTION activity continued to mount, with the award of 46 new construction and procurement contracts during the 12-month period.

In numerous communities, the major effort of line construction has been accomplished. Completed segments of aerial line are already standing in the cities of Albany, El Cerrito, San Leandro, Hayward, Pleasant Hill and north and south Oakland. Major portions of subway line have been excavated in downtown Oakland and Berkeley, as well as in the Mission District and Market Street area of San Francisco.

Thirty-two of the ultimate 57 sections of the Trans-Bay rapid transit

tube had thus far been lowered into position on the floor of the bay—including all 26 of the Oakland-extended tube sections, and the first six sections to be extended outward from the San Francisco shoreline.

Nearing completion was the final interior concreting work on BART's three-mile twin-bore tunnel through the Berkeley Hills. Basic structural work on major segments of more than ten miles of joint freeway and rapid transit construction in north Oakland and central Contra Costa County was nearly 50% completed.

Architectural design was completed on 12 passenger stations, including six in southern Alameda County for which finish contracts were awarded. Design had progressed to beyond the 50% stage on 14 of the 26 other stations on the system.

OPERATIONAL PLANNING was well advanced at the close of the fiscal year, with development of a computer simulation program to aid in planning future train schedules. A separate computer model is being used to establish work assignments for train and maintenance personnel.

Key members of the BART staff—with previous experience on other U.S. transit systems—are developing operational procedures for the network's many yards, shops, fare collection facilities, electrical installations and communications equipment.

They also are observing production of equipment being manufactured under previously awarded procurement contracts. Detailed planning additionally is underway, in cooperation with local police and fire department officials, for the provision of future passenger safety and fire protection.

EMPLOYMENT planning included development, by the District's personnel department, of job requirements for more than 100 future employee classifications together with the planning of future training programs. Negotiations are being conducted with various transit labor unions to determine the degree of preference that will be accorded

Bay Area Rapid Transit summer employees gathered with General Manager B. R. Stokes at the end of their 10 week work program. Participants were (left to right) Robert Wagnon, Brenda McCain, Marva Jones, Brenda Kelley, Jacqueline Gladney, Stokes, Byron Rogers, Gary Keyes, James Carter, George Perkins and Rodney Willis.



Clear-span concourse and a stairwell leading to train level are shown in BART's Central Berkeley Station. At street surface, a relocated park will surround the station's main entrance, expected to be the focal point for rapid transit travelers to the Berkeley campus of the University of California, downtown businesses and the nearby Berkeley Civic Center.



Secretary Robert C. Weaver from the U.S. Department of Housing and Urban Development traveled from Washington to Albany to take part in the dedication of a linear park through Albany and El Centro. Aiding Weaver (left) in planting an olive tree were U.S. Congressman J. Edgar Hoover (second from left) and Mayor Richard Dink of Albany (right).

San Francisco schoolchildren turned out in force in July, 1967, to take part in historic San Francisco subway groundbreaking ceremony. Welding shovels with unrestrained vigor, the youngsters were the high point of the "Dig It Up!"



existing Bay Area transit workers—while at the same time conforming with the District's official policy of guaranteeing future employment opportunity for minority workers.

The BART affirmative action program—already established as a model for other public works projects—has been notably successful in stimulating creation of new jobs for minority workers by the project's construction contractors. Chief example was the training and qualification of several hundred welders and tunnel workers for employment on the subway and Trans-Bay Tube construction.

REAL ESTATE activities included acquisition of 342 additional parcels of land for construction of the rapid transit network. This brought to 3,140 the number of property parcels thus far acquired—or 87% of the eventual total. Financial relocation assistance was provided, as part of the acquisition program, to occupants of 155 residential units and 105 industrial and commercial units.

The District real estate department also was deeply involved in developing recommended policies and procedures for best utilizing the air and substructure rights along the rapid transit network. Similar planning is underway for future station concessions. Detailed studies also were carried out, in consultation with the various project architects, to select suitable locations for advertising at each of the BART passenger stations.

FINANCIAL developments reflected the overall trend of progress in the rapid transit program—although they were overshadowed by the District's effort to secure additional project funding. BART continued to maintain a double-A rating on its general obligation bonds, and the net interest cost for its three recent sales compared favorably with the national Bond Buyers Index for municipal securities. An additional \$210 million in general obligation bonds were marketed during the fiscal year—bringing to \$580 million the total amount already sold from the District's 1962 voter-approved \$792 million bond issue.

Also marketed were \$12 million in similar bonds from the special \$20.5 million bond issue approved by the voters of Berkeley to finance additional subway construction in that city.

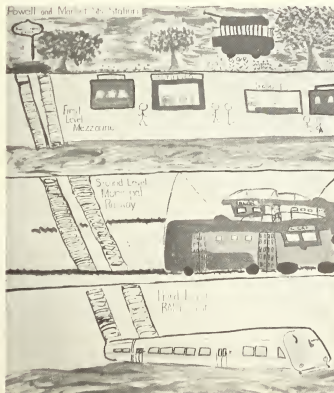
During Fiscal 1967-68, the District earned approximately \$8.7 million in interest from its temporarily reinvested bond proceeds, and \$275,000 from real estate sales and rentals.

The U.S. Department of Housing and Urban Development in April, 1968 approved a third capital grant of \$26 million to assist the BART construction. This brought total Federal project grants to \$52.3 million—not including \$8.6 million in previously-awarded demonstration funds. A fourth capital grant application for \$28 million was pending with the U.S. Department of Transportation at the close of the fiscal year.

An excellent safety record was achieved by BART construction contractors and workmen. The District's Transit Insurance Administrators



Annual civic event in the city of Albany is the lighting of a 40-foot-high Christmas tree atop BART's aerial structures, bridging one of that city's main thoroughfares.



As seen through children's eyes, BART was depicted by Raphael Weill Elementary School pupils of San Francisco in a class project devoted to the rapid transit system. This poster shows the three levels of transportation activity in subway stations under Market Street in San Francisco.

Rapid transit aerial structures extend for nearly 17 miles in Southern Alameda County. In the foreground is BART's Fruitvale Station site in Oakland, and in the background is the Oakland-Alameda County Coliseum Complex, to be served by another BART station.



reported that project accidents thus far have been 42% below the national average. Only 17 minor cases of "bends" were treated at the TIA-administered Compressed Air Medical Center, which was established to insure the health of BART's approximately 1,000 tunnel workers.

Close cooperation was maintained with other public agencies during the fiscal year. These included the San Francisco Municipal Railway and the Alameda-Contra Costa Transit District—with whom BART will coordinate its future passenger service—and the West Bay Rapid Transit Authority, which is developing a mass transit plan for the San Mateo County.

The District was involved in two major taxpayers suits, both of which were adjudicated before the close of the year. One suit resulted in a court decision that BART had justifiably relocated the site of its future Lafayette passenger station. In the other, the

court ruled that Berkeley's Ashby Station must be redesigned to place most of its structures below street level.

The growing worldwide attention being focused on the BART project was reflected by the numerous articles which appeared in national publications concerning the Bay Area rapid transit system and its development. Locally, there was an increased demand for speakers to describe the project. Members of the District staff appeared before more than 400 civic and business groups during the fiscal year, and the BART construction progress film was shown to over 600 elementary and high school classes throughout the Bay region.

BART was the recipient of three national design awards during the fiscal year. One, which cited the rapid transit system for its comprehensive excellence of design, was conferred by a panel of leading American architects and urban planners under the 1968 HUD Urban Design Awards Program. Similar

awards honoring BART's aerial structure design were presented by the Prestressed Concrete Institute and the Portland Cement Association.

The BART project also was named the Outstanding Engineering Project in the United States during 1967 by the National Society of Professional Engineers.

In January, 1968, the Board of Directors elected James P. Doherty as District President to succeed Adrien J. Falk, who had held the post for eight previous years. Arnold C. Anderson succeeded Mr. Doherty as Vice President.

This report is respectfully submitted to the Board of Directors pursuant to Section 28834 (e) of the California Public Utilities Code.

B. R. Stokes

B. R. STOKES
General Manager



National honors for total system excellence were bestowed on BART this year by the U.S. Housing and Department of Urban Development. Receiving honor awards were (left to right) BART President James P. Doherty; Henry Martens of the architectural firm of Maher and Martens; Tudor Engineering Company President Louis B. Riggs, representing the joint venture engineering team responsible for the design and construction of the BART network; Donn Emmons, architect, who created design of the aerial structures and is a partner in the architectural firm of Wurster, Bernardi and Emmons; John Lyon Reid, architect with Reid and Tarics, & Vernon DeMars, of the architectural firm of DeMars & Wells.



Transportation chiefs in the Bay Area are shown receiving the three-year \$792,000 Simpson & Curtin report on correlating transit activities in the Counties of San Francisco, Alameda and Contra Costa. Representing their agencies are (left to right) James K. Carr, general manager of San Francisco's Public Utilities Commission; Alan L. Bingham, general manager of the Alameda-Contra Costa Transit District, and BART General Manager B. R. Stokes.

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

BALANCE SHEET

June 30, 1968

ASSETS

Current assets:

Cash (including time deposits of \$155,575,000)	\$158,077,959
U.S. Treasury bills, at cost	44,307,698
Miscellaneous receivables	2,398,908
Total current assets	204,784,565

Construction in progress—NOTE D	556,497,184
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Contract guaranty and other deposits

(principally U.S. Government securities)	11,277,930
--	------------

Office furniture and fixtures, at cost	283,158
--	---------

Debt Service Funds, net assets

(including time deposits of \$16,390,000)—NOTE A	16,961,330
--	------------

\$789,804,167**LIABILITIES AND CAPITALIZATION**

Current liabilities:

Construction contracts	\$ 26,852,935
Other	352,423
Total current liabilities	27,205,358

Other liabilities:

Withheld from contractors on progress payments	9,536,172
Payable to State of California—NOTE C	26,063,940

Debt Service Funds—NOTE A	16,961,330
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Capitalization:

Construction funds:

General Obligation Bonds (\$812,500,000 authorized)—NOTE A	\$592,000,000
U.S. Government Grants—NOTE B	30,927,827
State of California Grant—NOTE C	60,815,860
	683,743,687

Accumulated net revenue	24,179,907
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Total construction funds	707,923,594
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General Fund accumulated net revenue	2,113,773	710,037,367
--------------------------------------	-----------	-------------

\$789,804,167

(See notes to financial statements)

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

STATEMENT OF REVENUE, EXPENSES AND ACCUMULATED NET REVENUE

Fiscal Year Ended June 30, 1968

	CONSTRUCTION FUNDS	GENERAL FUND
Revenue:		
Taxes		\$2,848,239
Interest	\$9,774,551	68,735
Other	19,189	
	<u>9,793,740</u>	<u>2,916,974</u>
Expenses:		
Personal services		2,753,173
Professional and specialized services	90,555	341,582
Rent, leased vehicles and office expenses		396,278
Bond issuance expense	107,433	
Travel expense		52,931
Other	30,566	30,857
		<u>3,574,821</u>
Less charges to Construction in Progress		1,156,577
	<u>228,554</u>	<u>2,418,244</u>
Excess of revenue over expenses	9,565,186	498,730
Accumulated net revenue at beginning of year	14,614,721	1,615,043
Accumulated net revenue at end of year	<u>\$24,179,907</u>	<u>\$2,113,773</u>

DEBT SERVICE FUNDS

Revenue:	
Taxes	\$18,772,620
Interest	889,962
	<u>19,662,582</u>
Less matured interest	18,258,381
	<u>1,404,201</u>
Balance at beginning of year	15,557,129
Balance at end of year	<u>\$16,961,330</u>

(See notes to financial statements)

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

NOTES TO FINANCIAL STATEMENTS

June 30, 1968

NOTE A—GENERAL OBLIGATION BONDS

In 1962 voters of the member counties of the District authorized a bonded indebtedness totaling \$792,000,000 of General Obligation Bonds of which \$580,000,000 were outstanding at June 30, 1968, with principal maturities from 1972 to 1999. Payment of both principal and interest is provided by the levy of District-wide property taxes. During 1966 City of Berkeley voters formed Special Service District No. 1 and authorized the issuance of \$20,500,000 of General Obligation Bonds for construction of subway extensions within that City. Special Service District No. 1 Bonds amounting to \$12,000,000 were outstanding at June 30, 1968, with principal maturities from 1970 to 1998. Payment of both principal and interest is payable from taxes levied upon property within the Special Service District.

Bond interest is payable semiannually on June 15 and December 15 from Debt Service Funds. The December 15, 1968 semi-annual interest requirement on the bonds will total \$12,211,028 and \$463,808 respectively. The composite interest rate on bonds presently outstanding is 3.86%.

NOTE B—U.S. GOVERNMENT GRANTS

Under grant contracts the U.S. Government provides financial assistance for research, beautification, and construction projects through the Department of Transportation, Urban Mass Transportation Administration. The District is administering a grant to the City and County of San Francisco (CAL-UTG-4), for added features in three Market Street Stations, and a grant to the City of Berkeley (CAL-UTG-9), in conjunction with the construction of subway extensions within Berkeley. The following grant contracts were in force as of June 30, 1968:

Project—Purpose	Maximum Grant	Funds Received
Demonstration Grants:		
CAL-MTD-2 (Transit Design)	\$ 6,219,333	\$ 6,081,886
CAL-MTD-4 (Fare Collection)	1,133,333	947,756
CAL-MTD-7 (Transit Hardware)	800,000	732,242
Calif. BD-1 (Beautification)	447,953	108,000
	<u>8,600,619</u>	<u>7,869,884</u>
Capital Grants—Construction:		
CAL-UTG-6	13,100,000	10,012,333
CAL-UTG-11	13,200,000	8,055,010
CAL-UTG-15	26,000,000	2,113,000
CAL-UTG-4	19,902,430	1,291,600
CAL-UTG-9	4,733,000	1,586,000
	<u>76,935,430</u>	<u>23,057,943</u>
TOTAL	<u>\$85,536,049</u>	<u>\$30,927,827</u>

NOTE C—STATE OF CALIFORNIA GRANT

Pursuant to Sections 30770-30782 of the California Streets and Highways Code the Department of Public Works of the State of California authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. Under Code Section 30778 the District must reimburse the State for costs applicable to the tube approaches in the amount of \$2,500,000 annually commencing December 31, 1971. At June 30, 1968 the District had received \$86,879,800 of which an estimated \$26,063,940 is repayable to the State of California.

NOTE D—CONSTRUCTION IN PROGRESS

In mid-1966 a re-estimate of project costs, based upon information then available, was initiated to determine the estimated cost of the rapid transit system at completion. This estimate, as currently revised, amounts to \$1,262,387,000 (including \$179,878,000 for the trans-bay tube to be financed by the State of California and \$72,875,000 for transit vehicles to be financed by revenue bonds payable from operating revenue). Presently, the ultimate cost of the system cannot be finally determined, as future economic conditions and possible changes in schedule to match fund availability may have a significant effect on the final cost of the system. It is contemplated that the system will be operational in 1971, provided that additional required financing becomes assured this year.

REPORT OF
INDEPENDENT ACCOUNTANTS

To the Board of Directors of the
San Francisco Bay Area Rapid Transit District

In our opinion, the accompanying balance sheet and the related statements of revenue, expenses and accumulated net revenue and debt service funds present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1968, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse & Co.

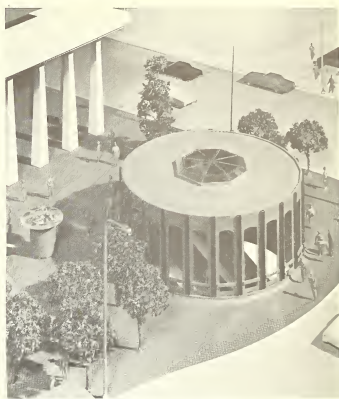
Price Waterhouse & Co.

San Francisco, California
August 30, 1968

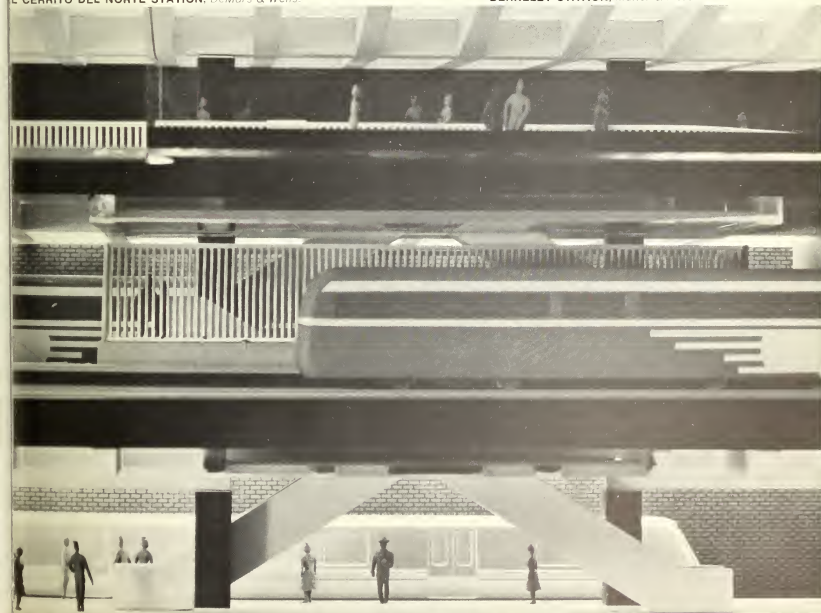
LANDSCAPE ARCHITECTS, WORKING IN CONCERT WITH STATION ARCHITECTS,
HAVE TREATED EACH STATION SITE, PARKING LOT AND ENTRANCE PLAZA AS A UNIT



CERRITO DEL NORTE STATION. *DeMars & Wells.*

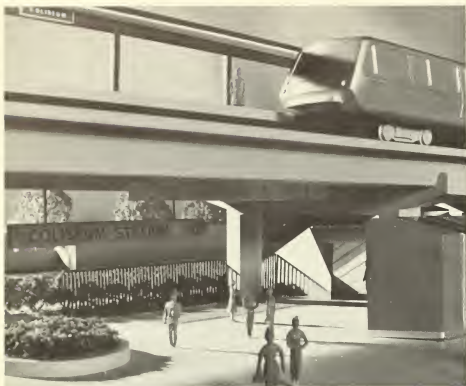


BERKELEY STATION. *Maher & Martens.*

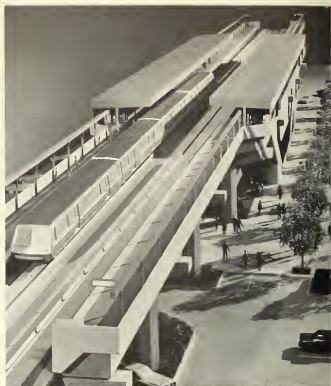


CIVIC CENTER STATION. *David & Tassie.*

FOURTEEN BAY AREA ARCHITECTURAL FIRMS HAVE SHAPED
THE TOTAL RIDE ENVIRONMENT



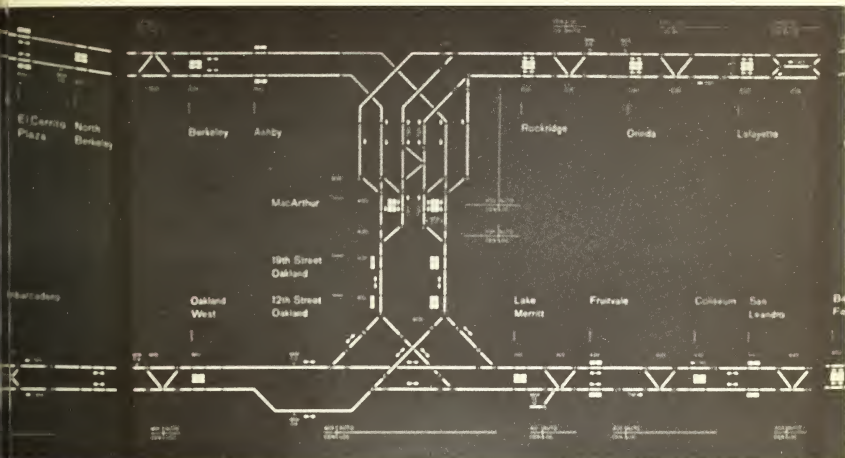
COLISEUM STATION, Reynolds & Chamberlain / Neill Smith.



SAN LEANDRO STATION, Masten & Hurd / Joseph Esherick



19th STREET OAKLAND STATION, Gerald M. McClellan & Associates



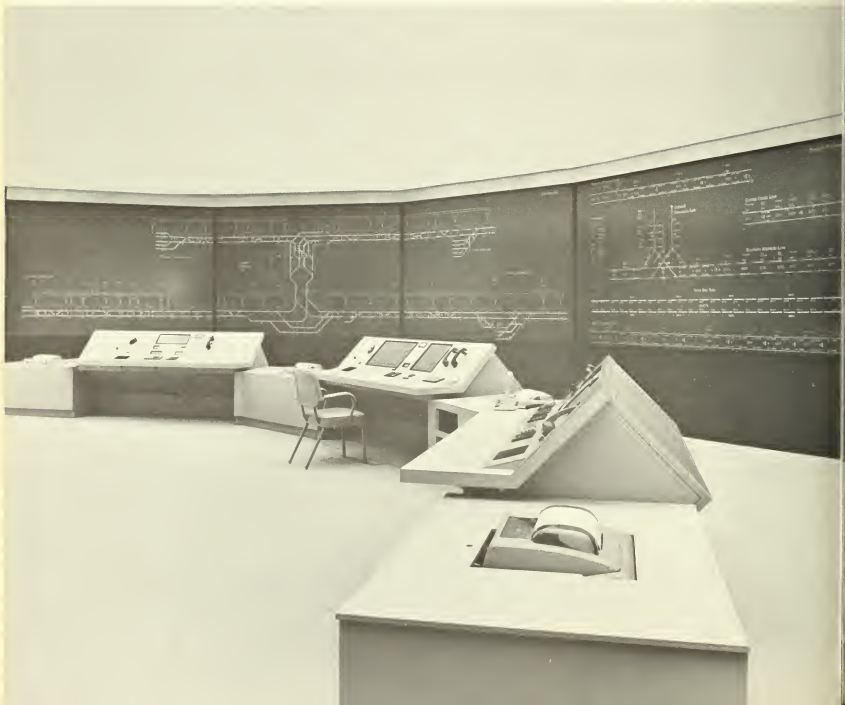
DOCUMENTS

JUL 3 1 1970.

SAN FRANCISCO

Fiscal year 1968-69 can be considered the Year of the Car at the San Francisco Bay Area Rapid Transit District.

At the close of the fiscal period, Rohr Corporation was awarded a contract to provide the District with 250 rapid transit vehicles, whose operation will be monitored at BART's automatic train control center (lower photograph) in downtown Oakland...



**SAN FRANCISCO
BAY AREA
RAPID TRANSIT
DISTRICT**

DIRECTORS

Alameda County

ARNOLD C. ANDERSON
President

WALLACE J. S. JOHNSON

H. R. LANGE

GEORGE M. SILLIMAN

Contra Costa County

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General Manager

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Assistant General Manager,
Administration

DAVID C. HAMMOND

Assistant General Manager,
Engineering and Operations

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MALCOLM M. BARRETT

General Counsel

ROBERT W. NELSON

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Director of Public Relations

WM. E. BENEDICT

Director of General Services

T. L. CARLSON

Director of Real Estate

G. B. OLSEN

Director of Personnel

L. H. DAHMS

Director of Planning and Research

E. A. TILLMAN

Director of Engineering and Construction

E. J. RAY

Director of Operations

To insure the operational reliability of BART's transit car design, the District obtained a special \$5 million demonstration grant from the U.S. Department of Transportation to help purchase and test its initial ten prototype vehicles. The cars will be exhaustively evaluated during a prototype testing period—and if necessary, modified in design—before production is begun on the remainder of the 250-car order.

A nucleus operations staff of nearly 50 key employees—many of them with extensive experience on other U.S. transit systems—was engaged in full-scale planning activities. The schedule calls for expanding the group during the coming fiscal year to almost 160 supervisory and operations personnel in four main divisions: Transportation, Power and Way, Rolling Stock and Shops, and Electronics and Communication. The primary activities of these personnel during fiscal 1969-70 will be devoted to the testing and checking out of equipment and readying the system for initial operation of the prototype transit vehicles.

As the fiscal year closed, work was nearing completion on both the main vehicle repair shop at South Hayward and the maintenance-of-way facility in Oakland. Contracts have since been awarded for construction of two smaller maintenance and storage facilities at Richmond and Concord.

Safety and Insurance: Construction workers and contractors continued to maintain an outstanding safety record on the BART project. The accident ratio was approximately 25 per cent lower than the statewide average for heavy construction.

As a result, the District has so far received almost \$2 million in workman's compensation dividends from its insurance underwriters.

The BART Compressed Air Medical Center administered treatment to 130 subway tunnel workers who experienced minor but predictable cases of "bends" or decompression illness on San Francisco subway projects with no loss in work time. The medical center, maintained by the District's Transit Insurance Administrators, has so far given health examinations to more than 2,000 tunnel workers and supervisory personnel.

Personnel: Close liaison was maintained between the District's personnel department and the various construction contractors to insure creation of a growing number of minority job opportunities and to stimulate improvement in the contractor-sponsored affirmative action programs.

The District's own equal opportunity program was successful in improving the status of numerous minority employees, and in expanding the scope of the Youth Opportunity summer employment training program.

Finance: Another \$140 million in general obligation bonds were sold during the 1968-69 fiscal year—followed by a subsequent sale of \$72 million in August 1969. This completes the marketing of the District's entire \$792 million bond authorization approved by the voters in 1962. Proceeds from the two final general obligation bond sales will be used to redeem \$142 million in bond anticipation notes which were issued earlier in the fiscal year.

In addition to its \$5 million vehicle prototype demonstration grant, the District received a \$28 million capital grant from the U.S. Department of Transportation. Authorization was given by Federal officials to use the funds for the actual purchase of vehicles—thus augmenting \$52 million in earlier capital grants awarded for system construction.

BART earned approximately \$16.4 million during the fiscal period from interest on its temporarily reinvested bond proceeds, and \$137,000 from sales and rentals of its real estate.

Steps were underway at the close of the year to establish a centralized electronic data processing system that can help maintain control of the District's future operating costs.

Public Relations: The first public open house of BART facilities was held on June 8 at the unfinished Berkeley and San Leandro stations. More than 10,000 persons visited the two construction sites, as well as the full-scale design model of BART's transit car which was also on display. The BART mock-up car has now been viewed by nearly 750,000 persons, including residents of the Los Angeles area where it was on loan in late 1968.

BART/ A LOOK INTO THE FUTURE

□ The great cities of the world continue to expand and extend their rail transportation systems.

The classical cities of Europe are well-known for the transit they keep. London, Paris, Moscow, Berlin, Stockholm and Madrid are political as well as cultural capitals. Smaller capitals on the Continent—Vienna, Budapest and Lisbon—also enjoy rapid transit systems. Important “second cities” have built or are building underground rail transit as well: Russia’s beautiful Leningrad, Spain’s industrial Barcelona, Britain’s busy Glasgow, and rebuilt Rotterdam and Hamburg in Germany. Russia’s “third city,” its ancient capital, Kiev, in the Ukraine, has built and is planning more rapid transit.

Japan’s tremendous industrial and commercial growth has been marked by rapid transit expansion in its three largest cities. The Chinese, in their thrust for world prestige, are launching a subway project in Peking, their capital.

On the North American continent, Toronto’s leap forward—its emergence as a great city—was based upon underground rail transit.

Montreal created its new system within the decade; Mexico City, just now.

Washington, D.C., this year is attempting to build its rail transit network, a precedent set years or decades ago in the other major Eastern cities.

Today, the communities comprising the San Francisco Bay Area sit some 2,000 miles away from the nearest subway; yet they will join this favorite and favored list of subway cities in about two years.

What will it mean?

The years 1970-1980 will be the decisive, formative decade for Bay Area rapid transit. By 1980, personal travel habits and regional transport patterns of the Bay Area community will have been strikingly reshaped.

By 1980, BART will have had nine years of seasoned patronage—along with complex adjustments, “debugging” and growth factors that invariably go with something new and big. BART patrons will consciously and unconsciously bring BART into their daily formulas of life, work, shopping and leisure time. These changing habits and patterns will emerge with great force, and with or without regional land-use or regional transportation planning.

As BART schedules change personal habits, so too will personal choices on the part of hundreds of thousands of residents interact to change certain BART schedules. These choices, now unpredictable, will result in a new dimension in personal mobility—the sense

of security, if not self-realization, in being able to selectively move through and about the BART service area.

As future thousands sense the fact that they can shift jobs without changing homes, change homes without shifting jobs, enjoy professional services and shopping facilities on the same fast, BART-propelled visit, combine a sports event in one city with a downtown dinner in another, and otherwise watch new horizons open up, BART train schedules will change accordingly.

Extension and Expansion: The limits of personal mobility will depend upon where and when inexorable, powerful thrusts of a thriving Bay Area economy and a constantly growing population generate new housing, commercial and employment centers. Governmental action by BART or any other agency can modify, but now cannot reshape, these primary forces.

By 1980, the region's population surge will have further tightened demand for central city land. The median age of the population will rise, experts declare, and a greater percentage of the population will thereby be employable (and "BART-able"). Particularly heavy growth is expected in such employment sectors as the finance industry, corporate headquarters, government, and personal services, according to the recently published Bay Area Transportation Study Commission (BATS) report.

By 1980, local and regional authorities will have been busy implementing several of the countless local and regional "plans" urging that BART be extended. Development policies incorporated in the Association of Bay Area Governments proposals of 1966, this year's BATS conclusion that rapid transit should expand to 230 miles of track in nine counties, and the Bay Conservation and Development Commission's concern with conservation and open space exemplify today's regional need for more rail rapid transit tomorrow.

Two huge airports will be tied together by BART during the decade. In the process both will be tied to at least 34 regional BART stations, including a completed regional Embarcadero Station within the totally transformed lower Market Street sector of downtown San Francisco. One or more stations in San Mateo County will have been added with the San Francisco International Airport BART extension.

Bus feeder systems in outlying areas will have been planned. Some will be operating late in the decade.

Electronic Systems at Work: As still the only totally automatic rapid transit network in the world, BART will be a proving ground for systems technology. "Train protection and supervision" will remain

as a BART contribution to the world of rapid transit. Constant, automatic adjustment of trains en route among the many BART stops will result from signals flowing in and out of the BART headquarters building.

New BART trains, built by a systems corporation rather than a conventional car manufacturer, will interface with other modes of transportation—perhaps skycars at airports, industrial parks and college campuses, and mini-buses downtown. Suburban systems will likewise be undergoing change, responding to the need for economical, individualized travel modes serving low-density residential areas.

Addition in 1969 of rapid transit as a function of the Golden Gate Bridge District will have triggered mass transit programs for suburban areas along the northern transportation corridor in Marin and Sonoma counties.

Highway construction will have continued—but in a total transportation complex. The need for a new freeway between and parallel to the Nimitz and MacArthur Freeways in Oakland, predicted in the 1969 BATS report, will have been shown to be a questionable investment because of the decision to ultimately place a new BART line through this corridor—an alternative noted in the same transportation analysis.

A uniform, incremental fare structure and ticketing procedure will have been proposed in the early 'seventies (to tie the BART system and local transit systems together), and acted upon.

The BART User: Many kinds of patrons will use BART during the 1970-80 decade . . . the white collar commuter, the blue collar worker, the shopper, the air traveler, the sports fan . . . to name a few. But the most profoundly and happily affected will be those otherwise too young, too old, too handicapped or too poor to rely on the automobile for personal mobility.

Most BART users will be white-collared and will leave their homes in the weekday mornings destined for central business districts. It is their cars which will not overwhelm already scarce downtown parking facilities, not glut the arterial freeways. By 1980, a larger percentage of this breed of BART user will be living in apartments instead of single-family dwellings. The 1969 BATS study, in fact, identified certain BART station neighborhoods as likely sites for BART-induced apartment living.

Proportionately more middle-class commuters will travel to jobs in "satellite" commercial developments in the vicinity of BART stations in suburban or semi-suburban settings. Single high-rise business structures, as well as clusters of them, will have arisen at various points along the BART line. The 1969 decision for

a high-rise structure at El Cerrito Del Norte station was an early and pivotal example.

Proportionately more white-collared commuters will be government employees, and San Francisco in the 'sixties had already become the Number Two employer of Federal workers in the nation. Major new government offices will have sprung up near the BART administration building in Oakland, which will also be the site for new high-rise residential and commercial activity.

Orderly developments between, as well as near, BART stations will also have begun. Public and private industrial planners will be relating new industries to mass transit access. They will tie directly to BART stations or to feeder routes fanning out from the stations. Many blue-collared city dwellers commuting to suburban work sites will board a bus or BART for a swift ride to connect with mini-buses which will transfer them to the major employment centers which are supporting a private mini-bus operation—rather than build costly parking lots and rely on congested freeways for their productivity.

In terms of dollars and cents, it will be the underemployed and unemployed who benefit most.

BART and the Poor: just as bus feeders would be meshing outlying suburban areas to BART during the decade, so too will new inner-city bus routes emerge, created to provide home-to-BART and BART-to-home personal mobility for the unemployed and underemployed poor of the three BART counties.

More than a third of BART's stations will serve poverty areas. This proximity to BART facilities will facilitate joint routings with AC Transit and the Municipal Railway.

Habits of the occasional user will markedly change as well. If the occasional user is also a non-driver, the changes will be dramatic.

For the off-hour woman shopper, the wares of the region—and the wares of the world sold near certain BART stops in the region—become accessible by rail rapid transit.

The Bay Area will have been the first major metropolitan area to have dealt successfully with airport-downtown-home access. The air traveler at Oakland's or San Francisco's jammed international airport will be able to choose regional destinations . . . no longer forced to go by freeway to a staging area.

The worlds of sports, recreation and cultural activities will have been altered for all time by the advent of BART operations in 1971-72, with the need for the auto minimized and opportunities for satisfying leisure activity maximized. □

An increasing number of world transportation experts, public officials and other dignitaries were attracted to the BART project. District staff members have conducted approximately a dozen construction site tours each week for such official visitors, as well as local civic organizations, government leaders, and school groups.

The BART project received prominent attention in numerous publications, including featured articles in all three national news magazines.

Planning and Administration: Because of the District's growing involvement in all forms of regional planning, a new staff department for planning and research was created.

The District specifically is taking a lead in the study and planning of a possible transit connection between BART's Coliseum station and the Oakland International Airport. Together with five other agencies, it is seeking a Federal demonstration grant to finance the study, which possesses nationwide implications in this era of increased air travel. The additional agencies are the Alameda-Contra Costa Transit District, Oakland Port Authority, County of Alameda, City of Oakland and the Oakland Coliseum, Inc.

Similarly the BART Board of Directors authorized the preparation of an application for another Federal fund grant to finance a study of the future impact of the rapid transit system on adjacent private property and land use. Data from the study will be used to plan possible transit route extensions and community zoning recommendations.

In a major reorganization move dictated by the District's increased volume of activities, the Board created a new staff legal department. Malcolm M. Barrett, who for many years served as Associate General Counsel while employed with the law firm of Pillsbury, Madison & Sutro, was named to the full-time position of District General Counsel.

District personnel received several honors during the fiscal year. The District's chief engineering officer, David G. Hammond, was selected as one of the top ten American "Public Works Men of the Year" for 1969. The award was bestowed jointly by the American Public Works Association and Kiwanis International. In

addition, the General Manager was appointed by the U.S. Secretary of Transportation to serve as a special consultant to the National Urban Transportation Advisory Council and was selected as one of 15 delegates to the Anglo-American Conference on Urban Transportation, sponsored by the Ditchley Foundation in England.

The District Board of Directors in December elected Arnold C. Anderson of Alameda County to be its new President for 1969. Succeeding Anderson as Vice-President was Director William M. Reedy of San Francisco.

This report is respectfully submitted to the Board of Directors pursuant to Section 28834 (e) of the California Public Utilities Code. □



B. R. STOKES/General Manager

BALANCE SHEET

JUNE 30, 1969

Assets

Current assets:

Cash (including time deposits of \$211,350,075)	\$215,122,167
U.S. Treasury securities, at cost	27,615,600
Federal Agency securities, at cost	127,446,629
Miscellaneous receivables	3,293,141
Total current assets	373,477,537
Construction in progress—(Note F)	768,763,419
Contract guaranty and other deposits	2,206,254
Office furniture and fixtures, at cost	306,003
Debt Service Funds, net assets (including time deposits of \$18,615,000) (Note A)	19,568,061
	<u>\$1,164,321,274</u>

Liabilities, Reserve and Capitalization

Current liabilities:

Bond Anticipation Notes (Note B)	\$142,000,000
Construction contracts	29,300,913
Other	361,523
Total current liabilities	171,662,436

Other liabilities:

Withheld from contractors on progress payments	2,911,905
Payable to State of California (Note D)	40,456,080
Debt Service Funds (Note A)	19,568,061
Reserve for self-insurance (Note E)	2,202,101

Capitalization:

Construction funds:

General Obligation Bonds [\$812,500,000 authorized, \$220,000 maturing June 15, 1970] (Note A)	\$732,000,000
U.S. Government Grants (Note C)	52,224,159
State of California Grant (Note D)	94,397,520
City of San Francisco contribution	3,426,322
	<u>882,048,001</u>
Accumulated revenue	43,355,147
Total construction funds	925,403,148
General Fund accumulated net revenue	2,117,543
	<u>927,520,691</u>
	<u>\$1,164,321,274</u>

STATEMENT OF REVENUE, EXPENSES AND ACCUMULATED NET REVENUE

FISCAL YEAR ENDED JUNE 30, 1969

General Fund

Revenue:	
Taxes	\$2,989,814
Interest	96,103
	<u>3,085,917</u>
Expenses:	
Personal services	3,219,276
Professional and specialized services	397,593
Rent, leased vehicles and office expense	424,003
Travel expense	66,552
Other	39,841
	<u>4,147,665</u>
Less charges to Construction in Progress	1,065,518
	<u>3,082,147</u>
Excess of revenue over expenses	3,770
Accumulated net revenue at beginning of year	2,113,773
Accumulated net revenue at end of year	<u>\$2,117,543</u>

Debt Service Funds

Revenue:	
Taxes	\$27,655,788
Interest	1,466,441
	<u>29,122,229</u>
Less matured interest	26,515,498
	<u>2,606,731</u>
Balance at beginning of year	16,961,330
Balance at end of year	<u>\$19,568,061</u>

STATEMENT OF CHANGES IN CONSTRUCTION FUNDS

FISCAL YEAR ENDED JUNE 30, 1969

Total construction funds, beginning of year	<u>\$707,923,594</u>
Additions during the year:	
General Obligation Bonds—Series J and K, sold in November 1968 and May 1969	140,000,000
U.S. Government grants received	21,296,332
State of California grants received (less \$14,392,140 estimated repayable to the State)	33,581,660
City of San Francisco contribution (principally land)	3,426,322
Accumulated revenue:	
Interest	\$17,786,634
Capitalization of prior years expenses (Note E)	<u>1,388,606</u>
	<u>19,175,240</u>
	<u>217,479,554</u>
Total construction funds, end of year	<u>\$925,403,148</u>

NOTES TO FINANCIAL STATEMENTS

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

June 30, 1969

NOTE A - GENERAL OBLIGATION BONDS:

In 1962 voters of the member counties of the District authorized a limited indebtedness totaling \$792,000,000 of General Obligation Bonds of which \$700,000,000 were outstanding at June 30, 1969, with principal maturing from 1972 to 1999. Payment of both principal and interest is provided by the levy of District-wide property taxes. During 1968 City of Berkeley voters formed Special Service District No. 4 and authorized the issuance of \$20,500,000 of General Obligation Bonds for construction of subway extensions within that City. Special Service District No. 1 Bonds amounting to \$12,000,000 were outstanding at June 30, 1969, with principal maturing from 1970 to 1989. Payment of both principal and interest is provided by taxes levied upon property within the Special Service District. Good principal is payable annually on June 15 and interest is payable semiannually on June 15 and December 15 from Debt Service Funds. Principal of \$20,500,000 Special Service District No. 1 Bonds matures on June 15, 1970 and interest of \$15,923,325 on General Obligation Bonds and \$2,700,000 on Special Service District No. 1 Bonds is payable on December 15, 1969. The composite interest rate on General Obligation Bonds currently outstanding is 4.02%.

NOTE B - BOND ANTICIPATION NOTES:

In October 1968, the District sold \$142,000,000 of Bond Anticipation Notes dated October 15, 1968, with principal and interest maturing September 15, 1969. The Notes were issued in anticipation of the sale of an equal amount of bonds of the District. Principal proceeds of the sale of Series K bonds, in the amount of \$70,000,000 received in May 1969 are set aside to retire an equal amount of Bond Anticipation Notes at maturity. On August 6, 1969, the District sold \$72,000,000 General Obligation Bonds, Series L, and principal proceeds were received on September 2, 1969. These proceeds are set aside for the retirement of the balance of the Bond Anticipation Notes. The September 15, 1969 interest requirement of Bond Anticipation Notes is \$4,126,283. The interest rate on notes presently outstanding is 3.17%.

NOTE C - U.S. GOVERNMENT GRANTS:

The U.S. Government provides financial assistance for research, beautification, certain construction projects and transit vehicle procurement. Additionally, the District is administering federal grants to the City and County of San Francisco (CAL-UTC-4) for added features in three Market Street stations, and a grant to the City of Berkeley (CAL-UTC-9) in connection with the construction of subway extensions within Berkeley. The following grant contracts were in force or approved as of June 30, 1969:

Project-purpose	Maximum grant	Funds received
Demonstration grants:		
CAL-MTD-2 (Transit Design)	\$ 6,219,333	\$ 6,081,886
CAL-MTD-4 (Fare Collection)	1,133,333	947,756
CAL-MTD-7 (Transit Hardware)	800,000	732,242
Calif. BD-1 (Beautification)	447,953	301,140
CAL-MTD-14 (Prototype Vehicles) ..	5,000,000*	
	13,600,619	8,063,024
Capital grants—construction:		
CAL-UTC-6	13,100,000	11,620,800
CAL-UTC-11	13,200,000	11,817,635
CAL-UTC-15	26,000,000	16,928,000
CAL-UTC-19	28,000,000	
CAL-UTC-4	19,902,430	1,291,600
CAL-UTC-9	4,733,000	2,503,100
	104,935,430	44,161,135
	\$118,536,049	\$52,224,159

*Grant is limited to \$3,000,000 pending the legal availability of the additional funds in Federal fiscal year 1970 program appropriations.

NOTE D - STATE OF CALIFORNIA GRANT:

Pursuant to Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. Under Code Section 30776 the District must reimburse the State for costs applicable to the tube approaches in the amount of \$2,500,000 annually commencing December 31, 1971. At June 30, 1969, the District had received \$134,000,000 of which an estimated \$40,456,080 is repayable to the State of California.

NOTE E - CHANGES IN ACCOUNTING PRACTICE:

During the year the District changed its practice of accounting for construction funds expenses by charging professional and specialized services, bond issuance expense and certain other expenses directly to construction in progress, whereas in prior years such expenses had been charged against the revenue, principally interest, of the construction funds. In addition, all previous such expenses charged against construction funds revenues through June 30, 1969 were capitalized.

By resolution of the Board of Directors of the District, certain credits not committed for use in the planned construction of the rapid transit system have been set aside as a reserve for self-insurance. The aggregate amount of such credits received during the year, principally insurance premiums refunded, net proceeds from sales of real estate and rental income, was \$2,202,101. The District intends to increase the reserve through future allocations of such uncommitted credits to the extent available.

NOTE F - CONSTRUCTION IN PROGRESS:

During the year, construction in progress increased as follows:

Balance, June 30, 1968		\$556,497,073
Construction	\$199,594,073	
Real estate acquired	6,900,448	
Utility relocation	3,518,326	
General Fund expenses capitalized ..	1,065,518	
Other	437,079	
	211,515,444	
Less: Rental income and proceeds		
from sales of real estate	(136,912)	
Insurance premiums refunded	(500,903)	
	(637,815)	
Capitalization of expenses through		
June 30, 1969, previously charged		
against revenues of construction		
funds (Note E)	1,388,606	212,266,235
Balance, June 30, 1969		\$768,763,419

The July 1, 1969 estimate of project costs, based upon information then available, was developed to determine the estimated cost of the rapid transit system at completion. This estimate amounts to \$1,362,426,000 (including \$179,878,000 for the trans-bay tube and its approaches to be financed by the State of California, \$78,307,000 for transit vehicles to be financed by Federal grant funds, revenue bonds, and other District sources, and \$9,026,000 for Embarcadero Station shell to be financed by San Francisco sources). Presently, the ultimate cost of the system cannot be finally determined, as future economic conditions and possible changes in schedule to match fund availability may have a significant effect on the final cost of the system. It is contemplated that initial operation of the system will begin in 1971, and that it will be operational in 1972.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors of the
San Francisco Bay Area Rapid Transit District

In our opinion, the accompanying balance sheet and the related statements of General Fund and Debt Service Funds revenue and expenses and changes in construction funds present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1969 and the results of operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year, except for the change, which we approve, in accounting for construction funds expenses, as described in Note E. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

San Francisco
September 5, 1969

Eric Waterhouse & Co.

Carpeted floors, upholstered seats, wide picture windows and a self-adjusting air-comfort system are highlight design elements of BART's production vehicle. Each 70-foot-long car will seat 72 passengers. Governed by the automatic train control program, trains will be capable of top speeds of 80 miles per hour, and average 50 miles per hour, including station stops...



While train attendants aboard BART vehicles will have capability to override automatic train control commands, their main functions will be to monitor doors, call out upcoming stations over an on-board loudspeaker system, and perform other duties relating to the comfort of the passenger.



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1969-70 ANNUAL REPORT

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT



Guiding the activities of the San Francisco Bay Area Rapid Transit District as it draws ever closer to revenue operations will be these members of the BART Board of Directors. Representing the three-county district are (left to right, seated) William M. Reedy, President, San Francisco; Stanley T. Grydyk, Vice-President, Contra Costa; William C. Blake, San Francisco; James P. Doherty, Contra Costa, and George M. Silliman, Alameda. Standing from left to right are Richard O. Clark, Alameda; Joseph S. Silva, Contra Costa; Nello J. Bianco, Contra Costa; Arnold C. Anderson, Alameda; H. R. Lange, Alameda, and Garland D. Graves, San Francisco. In the photograph at right is San Francisco Director William H. Chester (seated) and B. R. Stokes, BART General Manager.

(Biographical sketches of the directors appear on the inside back cover of this report.)



SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

DIRECTORS

Alameda County

ARNOLD C. ANDERSON
RICHARD O. CLARK
H. R. LANGE
GEORGE M. SILLIMAN

Contra Costa County

NELLO J. BIANCO
JAMES P. DOHERTY
STANLEY T. GRDYK
Vice-President
JOSEPH S. SILVA

City & County of San Francisco

WILLIAM C. BLAKE
WILLIAM H. CHESTER
GARLAND D. GRAVES
WILLIAM M. REEDY
President

STAFF

B. R. STOKES
General Manager

L. A. KIMBALL
Assistant General Manager,
Administration

DAVID G. HAMMOND
Assistant General Manager,
Operations and Engineering

RICHARD J. SHEPARD
Secretary

ROBERT W. NELSON
Controller

WILLIAM F. GOELZ
Treasurer

MALCOLM M. BARRETT
General Counsel

E. A. TILLMAN
Director of Engineering and Construction

E. J. RAY
Director of Operations

GEORGE L. McDONALD
Director of Public Relations

WM. E. BENEDICT
Director of General Services

T. L. CARLSON
Director of Real Estate

G. B. OLSEN
Director of Personnel

L. D. DAHMS
Director of Planning and Research



I am pleased to report that the BART project is on the verge of initial operations, with our prototype cars to be mobile this Fall.

Even though we still have major construction ahead, particularly at the terminal stations, I want to commend both the contracting industry and organized labor for their work thus far. The many contractor firms awarded construction bids have, almost without exception, performed to a high level. Further, the labor force, which at times has reached 5000 persons employed in the field, also has performed to the highest level of its skills.

BART construction has taken place more than a hundred feet below the waters of the Bay, 75 feet under the busiest streets of our Bay Area community, and in other areas where ingenuity and dedication have been the order of the day.

Now we are shifting to a new phase of the work. Now we are in the hands of less than a half-dozen major U.S. corporations which have been awarded our rolling stock, train control, fare collection and passenger sign contracts. These manufacturing and vendor firms, in their own way, face technological, procurement and coordination problems which I am sure equal the difficulty found in our earlier construction problems.

I am certain that these vendor firms will rise to equal the performance of the construction people, and deliver—in approximately one year—the superior operating system ordered by the people of our area.



William M. Reedy
President

Now considered 35 per cent complete, the Pleasant Hill Station in Central Contra Costa County takes shape amidst a wooded area that will be essentially preserved as a parking lot for 1500 automobiles. Projected to be one of BART's busiest facilities, the Pleasant Hill Station will be 30 rapid transit minutes from downtown San Francisco.



The Glen Park Station is located on a triangular plot bordered by Diamond and Bosworth Streets and Monterey Boulevard, and adjacent to the Southern Freeway at the intersection of San Jose Avenue in San Francisco. The structure, now in the early stages of the architectural finish contract, features the highest ceiling of all BART stations, tall columns, and walls sheathed in quarried slate.



The 1969-70 fiscal year represented a distinct turning point in the long-term program which will bring rapid transit service to the San Francisco Bay Area.

The mid-point of the fiscal year brought the passing of a decade.

For BART, the decade of the 1960s was a period in which basic approval of and financing for the project were obtained. Design was initiated and nearly completed, and the long construction cycle, at decade's end, was two-thirds over.

The decade of the 1970s will be quite different. Early in the period, the first prototype car will operate along the track. After the necessary testing period, passenger service will begin. Extensions of the system will come, as will sweeping community developments alongside and perhaps atop the rail and stations.

Rapid transit then will carry out its promise: it will be the strong backbone for a healthy Bay Area community.

During the fiscal year, BART began to put together all of the pieces which will soon make it operational.

All but a few short miles of the system were complete or under construction. Less than 10 per cent of detailed design remained.

Bay Area residents were suddenly aware of a new dimension to project progress: visible accomplishments in all three BART counties—but particularly along the initial line, where test operations would start this fall, and where initial passenger service would begin a year later.

In the critical first section between Hayward and North Oakland, track work was completed. Residents were warned of the hazards of the elec-

trified third rail. A laboratory car operated over the track. Both the Hayward Shop and the Oakland Maintenance Building were occupied. The BART headquarters structure was being built over the Lake Merritt Station.

In Contra Costa County, station and line construction continued. In San Francisco, some Municipal Railway rails were returned to their original location along Market Street. And in Oakland, Broadway once again became a major thoroughfare—with auto traffic passing above the twin stations waiting only their interior finish, and the trains themselves.

A significant part of BART progress came from outside the Bay Area, with initial procurement and fabrication of control, motor and fare collection equipment.

In Pittsburgh, Westinghouse had already produced 100 motors, and was subjecting them to traction testing. It also had outfitted two laboratory cars for dynamic testing of train control.

In San Jose, International Business Machines prepared for the custom fabrication of the prototype fare collection equipment, and had already programmed both the machines and the BART tickets for exhaustive tests with representative groups of people.

In San Diego, the Rohr Corporation geared up for production of the 250 BART vehicles, with delivery of the first prototype car scheduled for August.

EMPHASIS UPON OPERATIONS

With the award of the basic car contract to Rohr—a California firm—a count-down schedule for the start of revenue service was adopted. And within the BART organization itself, operational planning became a priority activity.

The rolling laboratory car—in use at the end of the year—was equipped to check out vehicle propulsion, braking and train control systems, and the wayside automatic train control equipment. This system start-up phase—now underway along the "A" line (Fremont-North Oakland)—will shift in turn to the remaining three system line segments.

BART's automatic train control "nerve center," a subway station and the District administration building are combined here at the Lake Merritt complex. At left is the steel structure for BART headquarters, due to be completed in late summer, 1971. At the bottom of the photograph is the full scale mock-up of the rapid transit vehicle. Lake Merritt Station will serve a variety of patrons, including workers at the Alameda County court house and administration building (upper left), visitors to the new Oakland Museum (below the court house) and students attending the future Laney Junior College, now under construction (far right).





At San Francisco's Balboa Park Station, a motor grader (top) smooths the future plaza area, while inside at the train platform level a workman in a personnel lift puts the finishing touches to a textured concrete ceiling section. The total structure is now over 60 percent complete and construction is in the architectural finish stage. Completion date for the subway station is set for late summer, 1971.

When the West Bay section of the BART system begins revenue operations in late summer, 1972, the Balboa Park facility will be 10 minutes away from downtown San Francisco.

The main repair shop in Hayward already is staffed to handle maintenance, inspection and retrofit activities required in the prototype vehicle testing period—where 10 preproduction cars are to be put through their paces on the "A" line prior to full car production in San Diego.

Track maintenance also has begun, with the base of operations in the maintenance-of-way facility, adjacent to the main line south of Lake Merritt.

At Lake Merritt, the system's computerized train control system was energized during the year. Simulated train operation programs began in January, and are being monitored by the display boards and consoles in the central control room.

Internally, there was similar concentration upon those activities required to run the rapid transit system successfully:

- The number of employees grew from 256 to 351, with the first hourly paid employees joining the District in August, 1969.
- Full scale training programs were developed for all phases of operation and maintenance of the system.
- System security and safety programs were in the planning stages—with a single goal in mind: a safe ride for the passenger.
- A pilot program, covering a dozen BART stations, was adopted for customer services.
- Facilities for the handicapped were designed for all stations.
- Agreement was reached on implementing a carefully controlled advertising program, worked out in concert with individual station architects.
- BART's initial mapping requirements were being drawn up.

CONSTRUCTION CONTINUES

With all of the planning for the passenger, BART still managed the largest construction project in the area. Total expenditures on the \$1.3 billion transit project reached a new high of almost \$900,000,000. The number of construction personnel during the year averaged 2,500—a potent force in the industry, and a positive factor for the Bay Area in a sluggish national economy.

BART's construction excellence

also could be seen on a first-hand basis by Bay Area residents.

In October, 1969, 20,000 persons entered the two Trans-Bay Tube portals for a "Walk Under Water." In June, more than 11,000 entered a single subway station in the Mission District of San Francisco.

The project, already honored by receipt of a dozen major awards, was given two more during the year.

The tube itself—now undergoing electrical/mechanical work—won a design award given by the National Consulting Engineers Council.

The safety performance of the District's contractors and workmen was cited as a new standard for the industry. The lost-time injury rate of 29.13 per million man-hours was nearly 50 per cent below normal experience.

With this record, BART received the largest workmen's compensation dividend in the history of California construction: \$1,358,483.

FINANCING SET

In the financial realm, the District completed the marketing of the original \$792,000,000 in General Obligation Bonds authorized by the voters in 1962. The composite interest cost on all the issues is 4.14 per cent—just slightly more than the original estimate of 4 per cent.

In November, 1969, the District imposed a one-half of 1 per cent sales tax in the three member counties—a tax authorized by action of the California Legislature. The tax, effective in April, 1970, will provide \$150,000,000 of capital funds, and assure completion of the system. The initial sale of sales tax revenue bonds took place in January, with another sale to be completed in August.

Earnings on temporary investment of bond proceeds amounted to \$19.8 million during the year.

The District's financial position was given further strength with assurance from the U.S. Department of Transportation that additional Federal funds will be available to BART.

A commitment also was received from the U.S. Department of Housing and Urban Development for a series of urban beautification grants which will—assuming the necessary city/

BART maintenance contracts—assure a full landscaping program for the network.

FUTURE PLANNING

The District took positive steps to prepare for start-up operation, and also to accommodate already-mounting requests for extending the initial system:

It signed a contract for design of San Francisco's Embarcadero Station, the first station to be funded entirely by a local community.

It intensified the critical liaison with its two prime transit partners—the Alameda-Contra Costa Transit District in the East Bay and the San Francisco Municipal Railway.

It initiated and received funding for two airport extension studies—to the Oakland and San Francisco airports—and three bus studies geared to expand and improve public transportation within the two East Bay counties.

It implemented a new performance-salary review plan to stimulate high productivity and reward individual growth and incentive more effectively.

It increased the labor relations, legal and purchasing staffs to prepare for increased administrative workloads before and after start-up operations.

Development began on computerized data processing programs for system accounting and the wide range of day-by-day management information needed to optimize operations.

Screening began to select an advertising agency, and a research firm was retained to develop a marketing plan.

A program to develop income from BART-owned property was being drafted.

NEW DIRECTORS

At the policy level—the Board of Directors—four new Directors were appointed.

Nello J. Bianco, a Richmond businessman, was appointed by the Contra Costa Board of Supervisors to replace H. L. Cummings, an original BART director.

William C. Blake, a San Francisco businessman and long-term Supervisor, was appointed by the San Francisco Board of Supervisors to replace Adrien J. Falk, BART's eight-term president who resigned from the board in October.

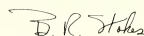
William H. Chester, a San Francisco labor official, was appointed by the mayor of San Francisco to succeed Richard A. Bancroft.

Richard O. Clark, a former mayor of Albany and present councilman, was appointed by the Alameda County Mayors' Conference to replace Wallace J. S. Johnson.

Incumbent directors are President William M. Reedy and Garland D. Graves of San Francisco; Vice-President Stanley T. Grydyk, James P. Doherty and Joseph S. Silva of Contra Costa, and Arnold C. Anderson, George M. Silliman and H. R. Lange of Alameda County.

Anderson served as BART president for the first half of the fiscal period, with Reedy vice-president. Reedy was elected BART president in December, with Grydyk elected vice-president.

This report is respectfully submitted to the Board of Directors pursuant to Section 28834 (e) of the California Public Utilities Code.



B. R. Stokes
General Manager

BALANCE SHEET

JUNE 30, 1970

Assets

Current assets:	
Cash (including time deposits of \$76,125,000)	\$ 77,100,447
U.S. Treasury securities, at cost	36,240,118
Federal Agency securities, at cost	141,383,016
Miscellaneous receivables	6,962,218
Total current assets	261,685,799
Construction in progress (Note E)	898,700,568
Insurance and other deposits	1,103,487
Furniture, equipment and vehicles, at cost	437,174
Debt Service Funds, net assets (including time deposits of \$12,545,000) (Note A)	18,475,287
	<u>\$1,180,402,315</u>

Liabilities, Reserve and Capitalization

Current liabilities:	
Construction contracts and others	\$ 22,146,247
Payable to State of California (Note D)	2,040,000
Total current liabilities	24,186,247
Other liabilities:	
Withheld from contractors on progress payments	2,581,824
Payable to State of California (Note D)	39,110,538
Debt Service Funds (Note A)	18,475,287
Reserve for self-insurance	20,424,060
Capitalization:	
Construction funds:	
General Obligation Bonds (\$812,500,000 authorized) (Note A):	
Bonds outstanding	\$ 803,780,000
Bonds matured and retired	220,000
	804,000,000
Sales Tax Revenue Bonds (\$150,000,000 authorized) (Note B)	50,000,000
U.S. Government Grants (Note C)	68,825,579
State of California Grant (Note D)	98,656,762
City of San Francisco contribution	3,486,534
	1,024,968,875
Accumulated revenue	48,362,605
Total construction funds	1,073,331,480
General Fund accumulated net revenue	2,292,879
	<u>1,075,624,359</u>
	<u>\$1,180,402,315</u>

STATEMENT OF REVENUE, EXPENSES AND ACCUMULATED NET REVENUE

FISCAL YEAR ENDED JUNE 30, 1970

General Fund

Revenue:	
Taxes	\$ 3,336,169
Interest	111,725
	<u>3,447,894</u>
Expenses:	
Personal services	4,377,481
Rent, leased vehicles and office expense	485,454
Professional and specialized services	391,053
Travel expense	93,026
Other	56,077
	<u>5,403,091</u>
Less—Charges to Construction in Progress	2,130,533
	<u>3,272,558</u>
Excess of revenue over expenses	175,336
Accumulated net revenue at beginning of year	2,117,543
Accumulated net revenue at end of year	<u>\$ 2,292,879</u>

Debt Service Funds

Revenue:	
Property taxes	\$34,734,914
Transaction and use taxes, net of \$229,400 implementation expenses	1,340,600
Interest	1,897,583
	<u>37,973,097</u>
Less: Matured interest	\$38,845,871
Matured principal	<u>220,000</u>
	<u>39,065,871</u>
	(1,092,774)
Balance at beginning of year	19,568,061
Balance at end of year	<u>\$18,475,287</u>

STATEMENT OF CHANGES IN CONSTRUCTION FUNDS

FISCAL YEAR ENDED JUNE 30, 1970

Total construction funds at beginning of year	\$ 925,403,148
Additions during the year:	
General Obligation Bonds—Series L, sold in August 1969	72,000,000
Sales Tax Revenue Bonds—Series A, sold in January 1970	50,000,000
U.S. Government grants received	16,601,420
State of California grants received (less \$15,154,458 repayable to the State)	4,259,242
City of San Francisco contribution	60,212
Accumulated revenue:	
Interest and other	\$23,229,417
Less—Amount transferred to reserve for self-insurance	<u>18,221,959</u>
	<u>5,007,458</u>
	147,928,332
Total construction funds at end of year	<u>\$1,073,331,480</u>

JUNE 30, 1970

NOTE A—GENERAL OBLIGATION BONDS:

In 1962 voters of the member counties of the District authorized a bonded indebtedness totaling \$792,000,000 of General Obligation Bonds, all of which were outstanding at June 30, 1970, with principal maturities from 1972 to 1999. Payment of both principal and interest is provided by the levy of District-wide property taxes. During 1966 City of Berkeley voters formed Special Service District No. 1 and authorized the issuance of \$20,500,000 of General Obligation Bonds for construction of subway extensions within that City. Special Service District No. 1 Bonds amounting to \$11,780,000 were outstanding at June 30, 1970, with principal maturities from 1971 to 1998. Payment of both principal and interest is provided by taxes levied upon property within the Special Service District.

Bond principal is payable annually on June 15 and interest is payable semiannually on June 15 and December 15 from Debt Service Funds. Principal of \$230,000 Special Service District No. 1 Bonds matures on June 15, 1971, and interest of \$17,403,140 on General Obligation Bonds and \$272,232 on Special Service District No. 1 Bonds is payable on December 15, 1970. The composite interest rate on bonds currently outstanding is 4.14%.

NOTE B—SALES TAX REVENUE BONDS:

The 1969 Legislature of the State of California authorized the District to issue revenue bonds totaling \$150,000,000 of which \$50,000,000 Series A bonds dated January 1, 1970 were outstanding at June 30, 1970. On August 5, 1970, the District sold \$50,000,000 Series B bonds dated July 1, 1970 for delivery August 24, 1970, with principal maturities of both series from 1972 to 1980. The Sales Tax Revenue Bonds are secured by a pledge of the proceeds of the Transactions and Use Tax authorized by the 1969 Legislature and from moneys received by the District from other sources, in lieu of Transactions and Use Tax proceeds, if legally made available. The bonds maturing on or after January 1, 1976 are redeemable prior to maturity at the option of the District on various dates at prices ranging from 104% to 100%. The collection and administration of the tax, which became effective April 1, 1970, is performed exclusively by the State Board of Equalization and all taxes are transmitted directly to the appointed trustee for the purpose of paying bond interest semiannually on July 1 and January 1 and principal annually on January 1. Interest of \$1,672,000 on the Series A bonds is payable on July 1, 1970. The composite interest rate on both series is 6.42%.

The State Board of Equalization has estimated that the revenue from the Transactions and Use Tax for the period April 1 to June 30, 1970 will be approximately \$6,800,000, of which the trustee had received \$1,570,000 at June 30, 1970.

NOTE C—U. S. GOVERNMENT GRANTS:

The U. S. Government, under grant contracts with the District, provides financial assistance for research, beautification, certain construction projects and transit vehicle procurement. Additionally, the District is administering federal grants to the City and County of San Francisco (CAL-UTG-4) for added features in three Market Street stations, and a grant to the City of Berkeley (CAL-UTG-9) in connection with the construction of subway extensions within Berkeley. The following grant contracts were in force as of June 30, 1970:

Project—purpose	Maximum grant	Funds received
Demonstration grants:		
CAL-MTD-2 (Transit Design)	\$ 6,219,333	\$ 6,081,886
CAL-MTD-4 (Fare Collection)	1,133,333	947,756
CAL-MTD-7 (Transit Hardware)	800,000	732,242
CAL-MTD-14 (Prototype Vehicles)	5,000,000	2,016,000
CAL-BD-1 (Beautification)	447,953	301,140
	13,600,619	10,079,024

Capital grants—construction:

CAL-UTG-6	13,100,000	11,620,800
CAL-UTG-11	13,200,000	13,127,150
CAL-UTG-15	26,000,000	23,349,305
CAL-UTG-19	28,000,000	5,098,000
CAL-UTG-4	19,902,430	1,291,600
	4,733,000	4,259,700
	104,935,430	58,746,555
	\$118,536,049	\$68,825,579

NOTE D—STATE OF CALIFORNIA GRANT:

Pursuant to Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. Under Section 30778 of the Code, further modified by an agreement with the State Department of Public Works, the District will reimburse the State for costs of the tube approaches. At June 30, 1970, the District had received \$154,267,300 of which \$55,610,538 is repayable to the State of California for the tube approaches. Reimbursement will be fulfilled by application of a \$16,500,000 credit to the District arising from highway betterments constructed with District funds on State Route No. 24 and by payment of \$1,000,000 on December 31, 1977, and \$2,500,000 annually beginning December 31, 1978. The District has also agreed to pay an additional \$2,040,000 to the State on September 1, 1970 in connection with State Route No. 24 construction.

NOTE E—CONSTRUCTION IN PROGRESS:

During the year, construction in progress increased as follows:

Balance at June 30, 1969	\$768,763,419
Construction	\$122,756,355
Real estate acquired	1,622,344
Utility relocation	3,225,122
General Fund expenses capitalized	2,130,533
Other	548,984
	130,283,338
Less: Rental income and proceeds from sales of real estate	(300,056)
Insurance premiums refunded	(46,133)
	(346,189)
Balance at June 30, 1970	\$896,700,568

The July 1, 1970 estimate of project costs, based upon information then available, was developed to determine the estimated cost of the rapid transit system at completion. This estimate amounts to \$1,359,129,000 (including \$179,878,000 for the trans-bay tube to be financed by the State of California and \$78,357,000 for transit vehicles to be financed by federal grant funds and other District sources). Presently, the ultimate cost of the system cannot be finally determined, as future economic conditions and possible changes in schedule to match fund availability may have a significant effect on the final cost of the system. It is contemplated that initial operation of the system will begin in 1971, and that it will be fully operational in 1972.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors of
San Francisco Bay Area Rapid Transit District

In our opinion, the accompanying balance sheet and the related statements of revenue, expenses and accumulated net revenue and changes in construction funds present fairly the financial position of San Francisco Bay Area Rapid Transit District at June 30, 1970 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

San Francisco
August 14, 1970

For Auditor

BIOGRAPHICAL SKETCHES OF BART DIRECTORS

ARNOLD C. ANDERSON has served as a Director of BART since its creation in 1957, and was appointed to that position by the Board of Supervisors of Alameda County. He has served as President and Vice-President of the BART board.

A California State Inheritance Tax Appraiser and real estate appraiser in Castro Valley, Mr. Anderson has served as Director on the Eden Township Hospital Board and as Trustee of the Castro Valley School District.

NELLO J. BIANCO was appointed a Director of the Bay Area Rapid Transit District in September, 1969, by the Contra Costa County Board of Supervisors.

Mr. Bianco owns and operates a delicatessen and catering service in the City of Richmond. Active in civic and business affairs in that city, he currently is Chairman of the Personnel Board of the City of Richmond.

WILLIAM C. BLAKE, a 15-year member of the San Francisco Board of Supervisors, was appointed by that body to the BART Board of Directors in November, 1969.

President of a general ship repair firm in San Francisco, Mr. Blake also has served as a Director of the Bay Area Air Pollution Control District and of the Golden Gate Bridge, Highway, and Transportation District. He holds a captain's commission in the U.S. Naval Reserve.

WILLIAM H. CHESTER, Vice-President of the International Longshoremen's & Warehousemen's Union, was appointed to the BART Board of Directors in January, 1970, by the Mayor of San Francisco.

Northern California Regional Director of the ILWU since 1951, Mr. Chester also serves on the Board of Directors of the United Nations Association of San Francisco, San Francisco Ballet, the San Francisco Council of Churches, and the Northern California Committee on Africa.

RICHARD O. CLARK was appointed to the BART Board of Directors in March, 1970, by the Mayors' Conference of Alameda County.

An insurance executive, Mr. Clark is a former Mayor and currently a Councilman of the City of Albany.

He is a member of the Board of Directors of the Alameda County Economic Opportunity Agency and holds a seat on the Executive Committee of the Association of Bay Area Governments.

JAMES P. DOHERTY, former Mayor and Councilman of the City of El Cerrito, was named to the BART Board of Directors in September, 1965, by the Contra Costa County Mayors' Conference.

A lifelong resident of the Bay Area, Mr. Doherty is manager of a lumber company in El Cerrito.

Mr. Doherty served as President of the BART Board of Directors in 1968 and in 1967 served as Vice-President.

GARLAND D. GRAVES, former Vice-President and Treasurer of Transamerica Corporation, was appointed a BART Director in October, 1967, by the Mayor of San Francisco.

A native Oklahoman, Mr. Graves was a supervising accountant with the nationally known firm of Ernst & Ernst before joining Transamerica. He is a member of the American Institute of Certified Public Accountants, and the California Society of Certified Public Accountants.

STANLEY T. GRYDYK, Vice-President of BART, was named a rapid transit district director in October, 1967, by the Contra Costa Mayors' Conference.

Former Mayor and currently a Councilman of the City of Richmond, Mr. Grydyk maintains a law practice in Richmond and is General Counsel for the San Pablo Sanitary District. He is a former president of the Richmond Bar Association and three-term Democratic County Central Committeeman.

H. R. LANGE, former Vice-President and currently a Director of Cutter Laboratories in Berkeley, was appointed to the BART Board of Directors in September, 1967, by the Alameda County Board of Supervisors.

Long active in the business and civic life of the San Francisco Bay Area, Mr. Lange is a Trustee of Golden Gate College and a member of the Oakland Museum Association. A former Oakland City Councilman, he is past president of the United Bay Area Crusade and the Alameda County United Fund.

WILLIAM M. REEDY, currently President of the San Francisco Bay Area Rapid Transit District, was named a BART Director in October, 1964, by the San Francisco Board of Supervisors.

A lifelong resident of San Francisco, Reedy is Administrator of the San Francisco Electrical Industry Trust.

He is the former Business Manager-Financial Secretary of the International Brotherhood of Electrical Workers, Local Union No. 6, and currently is a Director of the San Francisco Municipal Railway Improvement Corporation.

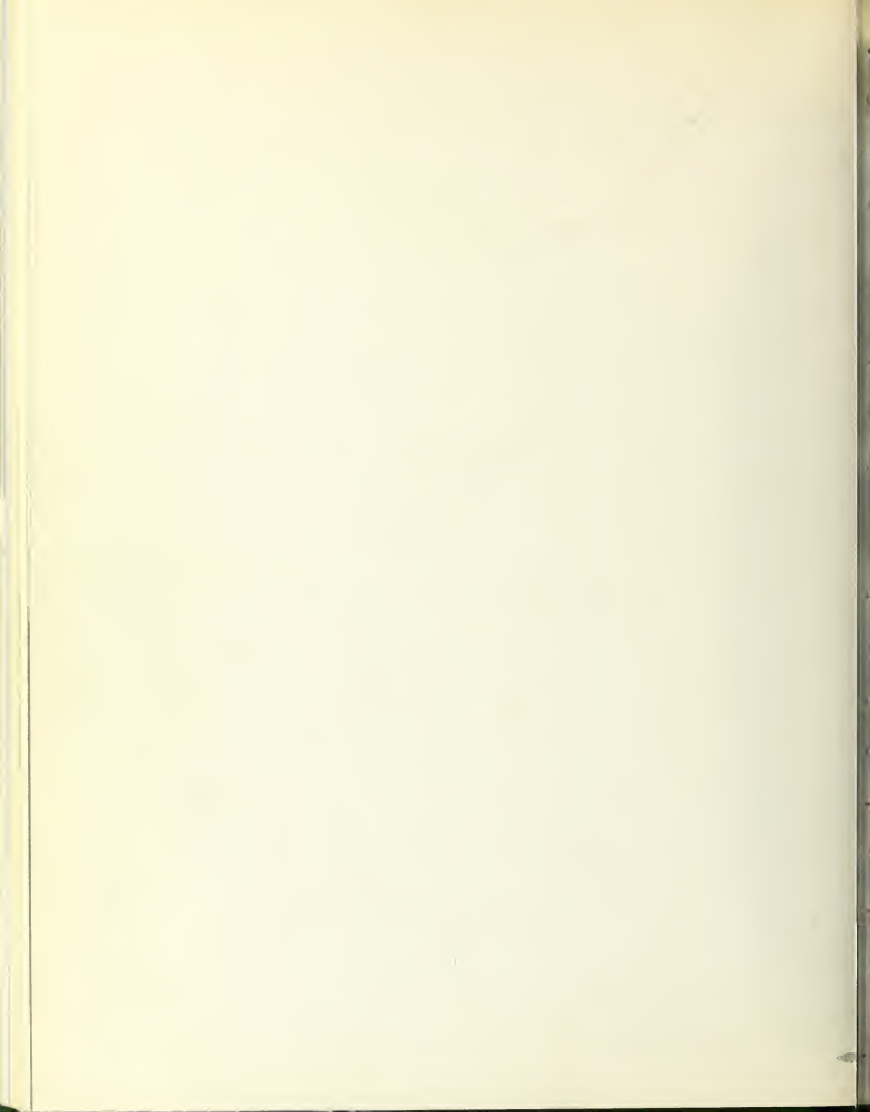
GEORGE M. SILLIMAN has served as a Director of the Bay Area Rapid Transit District since its creation in 1957. Appointed to the district by the Alameda County Mayors' Conference, he served as BART Vice-President in 1962 and 1966.

Mr. Silliman, a Director and Officer of the Bank of Fremont, formerly was Mayor and Councilman of the City of Newark. Prior to BART's creation, he was instrumental in drafting legislation that led to formation of the district.

JOSEPH S. SILVA was named a BART Director in October, 1965, by the Contra Costa County Board of Supervisors.

Mr. Silva, a former Mayor of the City of Brentwood, retired from the Contra Costa County Board of Supervisors in 1964 after 18 years of continuous public service to that county.

A rancher and former restaurateur, Mr. Silva held the office of Justice of the Peace of Brentwood before his election as a Supervisor.



1970-71
ANNUAL
REPORT

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT





Cover:

This striking wall sculpture of fiberglass and natural materials imparts an Aztec accent to the Richmond Station. William Mitchell created this and other sculptures at Lake Merritt, and 16th and 24th Street Mission stations. Colorful works of art "to lift the human spirit" are going into 14 of the 34 BART stations, with more to be added eventually through BART's art donor program.

Board of Directors



Arnold C. Anderson



Richard O. Clark



H. R. Lange



George M. Silliman



Nello J. Bianco



James P. Doherty



Stanley T. Grydyk



Joseph S. Silva



William C. Blake



William H. Chester



Garland D. Graves



William M. Reedy

San Francisco Bay Area Rapid Transit District

Established by the State of California. Authorized by the people of three counties to construct and operate a new high-speed rail rapid transit system under the direction of a representative Board of Directors.

Directors:

Alameda County — Arnold C. Anderson,
Richard O. Clark, H. R. Lange,
George M. Silliman, Vice President.

Contra Costa County — Nello J. Bianco,
James P. Doherty, President;
Stanley T. Grydyk, Joseph S. Silva.

San Francisco City and County — William C. Blake,
William H. Chester, Garland D. Graves,
William M. Reedy.

Staff:

B. R. Stokes, General Manager;
L. D. Dahms, Assistant General Manager—
Planning and Public Service; D. G. Hammond,
Assistant General Manager—Operations and
Engineering; L. A. Kimball, Assistant
General Manager—Administration;
R. J. Shephard, Secretary; R. W. Nelson, Controller;
W. F. Goelz, Treasurer; M. Barrett, General Counsel.

Department Heads:

C. K. Bernard, Research; W. E. Benedict,
General Services; W. F. Hein, Planning; R. D. Knapp,
Systems; W. D. Mersereau, Real Estate; G. B. Olsen,
Personnel; E. J. Ray, Operations;
E. A. Tillman, Engineering and Construction.

President's Message

During my first term as President in 1968, the problems we as District Directors faced were quite different from those we faced during the fiscal 70-71 period.

"Will BART be completed?" was a major question still unanswered at the close of fiscal 67-68. The reason, you may recall, was our requirement for \$144 million in additional construction funds, a requirement resulting from inflation, accumulated delays, and additions to the system required by the District taxpayers.

The Directors had resolved, in this crisis, that no part of the system would be put into operation until completion of the entire system was assured. In the spring of 1969, the State Legislature authorized the Board to levy a half-cent District sales tax to cover that fund requirement.

"When will BART operate?" became a leading question during the fiscal 70-71 period. Major BART contractors changed their schedules to meet problems as they arose, with major emphasis on equipment reliability. Target dates for revenue service start-up were revised on a "latest information" basis. At this writing, the prospects of opening one-third of the system by next spring, and the full East Bay-West Bay system by next fall, look increasingly good.

We will continue to apply constructive pressure to our contractors for revenue service at the earliest prudent date. I emphasize the word prudent, because we are mindful of several transit systems which put new equipment into revenue service prematurely. The result was rolling stock whose unreliable performance was a costly disappointment to patrons.

As impatient as we all are to see BART trains carrying commuters, the technical facts of life involved in implementing the nation's first all-new rapid transit technology cannot be set aside.

"Where will the basic BART system be extended to in the near future?" was another leading question addressed by the Directors during the fiscal period. At issue was the construction priority of future BART extensions, in the event local matching funds for federal aid can be obtained to fund the new projects.

On this point, the Directors re-stated their standing policy that no District funds are to be spent on extensions outside the District and again declared priority for extensions to Pittsburg-Antioch, Livermore - Pleasanton, and northwest San Francisco.

When BART service begins and where BART trains may go in the future are major concerns which remind us that the public is understandably anxious to see the realization of rapid transit in the Bay Area.

That we can now have these concerns should remind us of the tremendous progress . . . of the successful resolution of great problems along the way . . . necessary to bring us to this point in the BART project. And, having reached this point, I am more confident than ever that BART will prove itself one of the best investments ever made by the people of the Bay Area.

James P. Doherty
JAMES P. DOHERTY
President



Report of the General Manager

Fiscal 1970-71 was a year of diverse accomplishments by the District staff, with emphasis on closing system construction, the transition to operations, and expanding staff work in transit planning and other areas.

Most importantly, BART prototype test cars began rolling.

The following highlights will provide an accurate overview of District-wide activities during the reporting period.

Engineering & Construction The closing phase of system construction continued as a vital staff activity, with completed facilities and right-of-way substantially more evident than in any previous period.

CONSTRUCTION MILESTONES: Nine were fully complete, including architectural finish, and 10 stations more than 90% complete. Eleven stations were in or near architectural finish stage. Station site agreements were concluded at Richmond, Concord and Daly City, and construction on these line terminus stations was started. Architectural design of the Embarcadero Station shell was completed and construction is well underway. BART trains will operate through the Embarcadero Station without interruption while construction is completed. Parking lots, landscaping and specialty work were 22% completed, systemwide. All 75 miles of BART lines were under construction. Progress on systemwide work had reached 77% for trackwork, 69% for third-rail electrification, and 21% for automatic train control and communications.

OUTER MARKET STREETCAR LINE: One mile of subway construction on the segment of the San Francisco Municipal Railway line to be reconstructed by BART—as well as the Van Ness Muni Station—was begun from Civic Center Station to Duboce tunnel portal. Design of Church Street and Castro Street stations was also started.

CONTRACTS: A total of 124 construction contracts have been completed; 63 were underway, and 55 remained to be awarded. The latter cover remaining work on the Muni Outer Market line, as well as station parking lots, landscaping and specialty work. By period's end, construction and procurement contracts awarded on the project totaled more than \$905 million, with an 1800-man contractor work force systemwide.

OTHER MAJOR PROJECTS: The Hallidie Plaza entrance to Powell Street Station was undergoing design, and the BART Administration Building was being readied for occupancy by December, 1971. Agreement was

concluded with the City of San Francisco, establishing the BART scope of construction on the West Portal (Muni) Station and the Embarcadero Station at \$22.5 million.

Following agreement with the Port of San Francisco, the District awarded a \$2.5 million contract to construct an over-water platform adjacent to the San Francisco Ferry Building. Its purpose is to safeguard the transbay tube and ventilation structure from harbor navigation and other potential hazards.

The District's \$7.5 million landscaping program—partly funded by several of the largest federal beautification grants ever made—had progressed to a total of 19 contracts either completed or under construction. Fifteen landscaping contracts remained to be awarded. Landscaping in San Francisco began with a contract award for the line from Modoc Avenue to Colonial Way. Most system landscaping to be done by BART should be accomplished during fiscal 71-72, but late award of the Concord and Daly City Stations will see landscaping completed at these sites the following year.

Another extensive program provides for full system use of BART by handicapped persons. The program calls for elevators and many other special features of station design for BART patrons in wheelchairs. Provisions for the elevators—a key element in the program—have so far been made in all but three BART stations.

On January 27, "hole-through" of the 34th and final tunnel bore for BART trains was accomplished 70 feet below Market Street at the west end of Montgomery Street Station. The final hole-through (excluding Muni tunnels) climaxed six years of tunneling 20 track miles underground.

This extended effort concluded with an excellent safety record: a single fatality not related to tunnel-driving, and a decompression illness ratio of 0.14 per 100 decompressions. The District's Compressed Air Medical Facility was deactivated in June upon completion of compressed-air tunneling work. The facility examined 3,344 workers since 1967, who experienced 138 incidents of decompression illness out of 971,170-man decompressions.

Future extension planning required a marked increase in preliminary engineering planning studies. These included the Livermore-Pleasanton and Pittsburg-Antioch areas, with additional assistance to Oakland and San Francisco airport transit access projects.

Efficient phase-out of large construction



B. R. Stokes, General Manager



Passenger Concourse—Lake Merritt Station

contracts, with stringent control of costs, work quality and work schedules, will continue to be a major staff concern until project completion.

Operations The District's transition from construction to an operating rapid transit system in all technical and manpower areas continued to receive maximum emphasis.

A major milestone was the August 28 delivery of the first BART prototype test car from the Rohr Corporation plant in Chula Vista, California. Nine cars were put into continuous night-and-day testing during the period.

This extensive program—the first in the transit industry—was established to prove out performance and reliability of the vehicles' all-new design prior to start-up of production revenue service cars.

Some major problems uncovered by the running tests were resolved. Others, particularly in the area of equipment reliability, remained at the end of the period. The test program is justifying itself many times over, both in prove-out and in refinements of the basic design.

The comprehensive master plan for system operations was completed in detail. Service frequency of trains will range from two to 20 minutes depending on train routes and changing levels of service during each 20-hour operations day. (A complete operations schedule will be found on the inside back cover of the Annual Report.)

Third rail energization was accomplished from the main District Trainyard in Hayward 12 miles north to the vicinity of Fruitvale Station on the Southern Alameda County Line. BART test cars initially ran on manual controls over this segment. However, June marked the first run of a vehicle on automatic train control between the Coliseum and Hayward stations. By the end of June, Westinghouse Corporation had activated automatic train control in four of the twelve stations scheduled to open initially for revenue service.

At Central Train Control in the Lake Merritt Station, Westinghouse personnel continued final checkout of the computer programs and communications required to put the computer supervision capability of the ATC into service. BART Central Control was activated on a 24-hour basis, with responsibility for monitoring and coordinating all rolling equipment on the main line, as well as systemwide activities in general.

An extensive safety campaign, including letters to parents and schools, was conducted prior to energizing a segment of the "A" line. This campaign will be extended as line energization is accomplished on other system segments.

The Hayward Trainyard and Shops were

completed and occupied for the car test program. The train yard was energized; and the industry's first computerized yard-switching system was completed by Philco-Ford Corporation and activated.

Also activated was the Oakland Shop, where expanding maintenance-of-way activities are based. Activities included rail and switch maintenance along the "A" line, subway grouting and caulking, sump pump maintenance, and general care of landscaping and drainage along the right-of-way. All conceivable operating emergencies were identified, and provided for in terms of procedures and equipment.

The District initiated contact with all on-line law enforcement agencies to coordinate security procedures for stations, parking lots, and the right-of-way.

Heavily emphasized was development of training programs for system transportation and maintenance personnel, who will be hired prior to revenue service. They will eventually comprise the major segment of the District work force.

Planning & Research These activities multiplied considerably in support of revenue operations and future transit service projects.

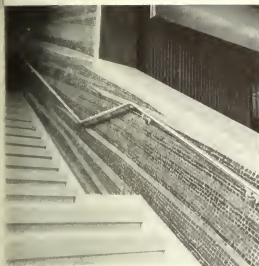
BART Directors last May were provided with a comprehensive study on BART fares in order that they could provide the fare system manufacturer, International Business Machines with a tentative fare schedule by June 1. This major research effort involved four months of gathering and analyzing information on projected patronage and revenues, demographic data, and other financial and marketing factors.

The Directors selected the lower of the two fare plans recommended by the staff, with a minimum fare of 30 cents and a maximum of \$1.05. A comprehensive fare schedule which might include discounts for special groups such as senior citizens remains to be acted on by the Board.

The staff provided project supervision (minimizing cash obligations) for some five cooperative projects. They include studies involving transit extensions to San Francisco and Oakland airports, and bus transit feeder and local service in Alameda and Central Contra Costa County communities.

The Bay Area's growing transportation problems clearly indicate the need for a planned and orderly extension of rail transit beyond the basic system. Consequently, the District's planning role is expanding considerably within the network of local, state and federal agencies concerned with public transportation.

The Metropolitan Transportation Commission was established by the State in November 1970, to coordinate all transportation



Mosaic Stairway—El Cerrito Plaza Station



projects in the Bay Area. The District entered into an agreement with this agency to undertake six highly significant projects.

They include route studies for three extensions within the District: to areas of Livermore - Pleasanton, Pittsburg - Antioch, and northwest San Francisco. The fourth project is a second-phase engineering study of two transit options between BART's Coliseum Station and the Oakland International Airport. The fifth and sixth projects aim at developing efficient scheduling between BART trains and feeder bus service to BART stations in all three District counties.

These six projects are funded for approximately \$2 million, with two-thirds federal aid. Indeed, they were a major factor in raising federal aid from one-half to two-thirds for Bay Area transit capital projects.

The staff completed supervision of the first-phase study for determining basic feasibility of transit access to the Oakland Airport. An agreement was reached with the California State Division of Highways to accommodate rapid transit rights-of-way within the median of planned highways. This insures right-of-way provisions for BART extensions within medians of proposed freeways to the Pittsburg-Antioch area and to the Livermore-Pleasanton area.

The District participated with San Mateo and San Francisco Counties in the San Francisco Airport Access Project, a federally-funded study for possible extension from the District's Daly City Station to the airport. The study will conclude late in 1971.

Accounting & Finance The management, deployment and conservation of District funds continues as a key area. Construction phase-out generated the highest volume of accounting and auditing of any report year, including completion of 22 contracts in excess of \$120 million. Disbursements exceeded \$182 million.

Some 94 separate formal audits were prepared for District purposes, with unusually heavy support in audits and financial analyses provided to outside agencies on District-related matters.

The staff assisted federal agencies in developing new financial provisions and uniform reporting procedures essential to future federal subsidies for transit, taking industry initiative in this regard.

Some 5,000 man hours were devoted to converting accounting and auditing requirements to the District's computerized Management Information System.

Plans were completed for systemwide collection of cash from station automatic fare machines. An East Bay facility was being planned to serve as the collection and counting center for up to 10 tons of coins

daily, plus currency.

Issuance of \$150 million of District's half-cent sales tax revenue bonds was completed during the period with \$50 million marketed in August, 1970, and \$50 million in January, 1971, marking the second and third issues.

Earnings on temporary investment of District general construction funds exceeded \$19 million for the period.

A confident financial forecast was submitted to the Directors in May, 1971, indicating that District funds are sufficient to complete systemwide construction and cover start-up costs prior to full system revenue operation.

A total project cost of \$1.4 billion was forecast in April, compared to the previous period's forecast of \$1.359 billion. A major factor in the increase will be rising construction costs to be incurred because of delays in scheduling remaining BART work on the San Francisco Municipal Railway's Outer Market streetcar line.

As it has each year, the District again received a substantial dividend from its workmen's compensation insurance carrier. Dividends to date total \$3.7 million.

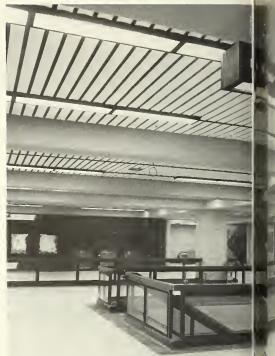
During the period, the U.S. Department of Transportation increased an earlier grant of \$28 million to \$68 million—the major cost of the District's initial fleet order of 250 transit cars. A major grant of \$521,000 was made by the U.S. Department of Housing and Urban Development (HUD) for system landscaping. Earlier grants of \$339,500 and \$500,000, plus a fourth grant expected in fiscal 71-72, make HUD very much a partner in the District's \$7.5 million beautification program.

Administration An orderly, efficient transition to full revenue operation was the staff's primary administrative responsibility during the reporting period, with all related support activities receiving top priority in District resources.

Of particular significance was the establishment of the post of Assistant General Manager—Planning and Public Service in November. In this post is centered broad responsibility for planning future system extensions and for maintaining keen awareness of the public's needs and desires in rapid transit.

To fund a wide range of operation start-up activities, the most comprehensive financial analysis ever undertaken by the staff was accomplished in the preparation of the Administrative Budget submitted to the Directors for fiscal 71-72.

Principal payments on BART construction bonds commence on June 15, 1972, causing an increase in District property tax levies for fiscal 71-72 to fund the \$43 million debt



Mezzanine—Lake Merritt Station

service budget. Increased rates per table below will decline in subsequent years.

PROPERTY TAX RATES

	1971-72			1970-71	
	Admin. Expenses	Debt Service	Total Rate	Total Rate	
Alameda	4.7¢	57.8¢	62.5¢	49.7¢	
Contra Costa	5.0	60.7	65.7	52.7	
San Francisco	5.3	65.1	70.4	56.5	

NOTE: Tax rate is per \$100 assessed property value. Different tax rates reflect equalization of different assessment formulas among counties.

The District's comprehensive program for computer acquisition and processing of all types of data for business or administrative purposes was partially activated in March at the Lake Merritt facility.

Substantial progress was made on the District's computer programs for the acquisition and processing of all business-administrative data, collectively called the Management Information System. With the installation of an RCA computer at the Lake Merritt facility in March, the MIS was activated for payroll and inventory control. During fiscal 71-72, programming will be accomplished for fixed assets and daily operations accounting, labor distribution, manpower budgeting, and maintenance planning to complete full MIS activation.

Most of the contracts for the spare parts, supplies, and maintenance equipment required for revenue operations were awarded during the period, with storage space and investment in spares minimized by computerized inventory control.

A major activity has been preparing for the staff's move in late 1971 to the new District Administration Building, which is located atop the Lake Merritt Station and Control Center in downtown Oakland. The District Employment Office will be located in leased facilities in downtown Oakland.

The District's increasing number of agreements and joint ventures with other agencies, as well as its increasing range of contract negotiations and settlements, brought an increase in staff legal work during the report period.

Personnel & Industrial Relations The purpose of BART's sophisticated technology is to provide a strongly competitive transit service with a relatively small but skilled and flexible work force. Developing such an operations work force continues as a vital staff responsibility.

Total District personnel increased from 350 to 527 during the period, of which 141 are hourly employees. The staff processed 5,000 applications, conducted 1,500 interviews, talked to 4,500 drop-in applicants, and answered 18,500 telephone inquiries.

Manpower pools of qualified applicants were developed so that actual hiring of several hundred employees into operations and maintenance areas can be adjusted to any scheduling changes for revenue operations.

Mr. Sam Kagel, one of the leading arbitration experts in the United States, was appointed by the state to help develop ground rules for collective bargaining among District employees.

The District's new job classification and salary administration program was extended from professional-supervisory personnel to include office-clerical employees during the period. Five years went into developing this new merit-incentive plan, which provides a base for truly progressive personnel policies.

A new employee benefits package was also approved, which should enable the District to compete strongly for top quality personnel.

In both hiring and development of manpower pools, the staff actively sought out qualified minority group applicants through contact with some 200 ethnic groups in the area. At the last monthly survey, minority representation was up to 26 per cent of the staff, and to 35 per cent of the contractor work force. Minority hiring programs were developed or monitored by the staff for 26 District contracts containing federal "affirmative action" provisions.

Real Estate By period's end, the District had completed acquisition proceedings and acquired title to more than 95 per cent of its 75-mile right-of-way.

East Oakland to Hayward right-of-way was acquired from the Western Pacific Railroad, with segments in Oakland and Richmond from the Southern Pacific.

An acquisition is expected from the Santa Fe Railway between Berkeley and Richmond. All of these acquisitions point up efficient land use which results from the sharing of existing transportation corridors wherever possible throughout the system.

District conveyances and easements were made to other agencies to accommodate widened or relocated streets, and also for installation of needed new utilities across the right-of-way.

Land parcels surplus to District needs were either sold or returned to the tax rolls, or leased for income and possessory taxes. District income from sales and leases was \$300,000 for the period, with a cumulative recapture of \$400,000 on BART real estate holdings.

By the end of fiscal 71-72, the activity will have transitioned from a high of 60 staff members engaged in right-of-way acquisition to 15 staff members engaged in a broad range of property management activities. ●



Three-Car Train—Bay Fair Station

San Francisco Bay Area Rapid Transit District

Balance Sheet

June 30, 1971

Assets

Current assets:	
Cash (including time deposits of \$154,000,000)	\$ 155,106,373
U.S. Treasury securities, at cost	15,417,812
Federal Agency securities, at cost	87,039,467
Miscellaneous receivables	3,014,625
Total current assets	260,578,277
Construction in progress (Note F)	1,038,180,181
Insurance deposits and notes receivable	4,387,364
Furniture, equipment and vehicles, at cost	435,495
Debt Service Funds, net assets (including time deposits of \$23,731,900 and U.S. Treasury and Federal Agency securities of \$14,767,440) (Notes A and B)	38,594,926
	<u>\$1,342,176,243</u>

Liabilities, Reserve and Capitalization

Current liabilities:	
Construction contracts and others	\$ 21,747,987
Other liabilities:	
Withheld from contractors on progress payments	2,129,545
Payable to State of California (Note D)	39,110,538
Debt Service Funds (Notes A and B)	38,594,926
Reserve for self-insurance (Note E)	15,000,000
Capitalization:	
Construction funds:	
General Obligation Bonds (\$812,500,000 authorized) (Note A):	
Bonds outstanding	\$ 803,550,000
Bonds matured and retired	450,000
	804,000,000
Sales Tax Revenue Bonds (\$150,000,000 authorized) (Note B)	150,000,000
U.S. Government Grants (Note C)	86,159,355
State of California Grant (Note D)	108,142,162
City of San Francisco contribution	3,529,758
	1,151,831,275
Accumulated revenue	71,622,906
Total construction funds	1,223,454,181
General Fund accumulated net revenue	2,139,066
	<u>1,225,593,247</u>
	<u>\$1,342,176,243</u>

See Notes to Financial Statements

Statement of Revenue, Expenses and Accumulated Net Revenue

Fiscal Year Ended June 30, 1971

General Fund	
Revenue:	
Taxes	\$3,381,687
Interest and other	85,732
	<u>3,467,419</u>
Expenses:	
Personal services	6,304,171
Rent, leased vehicles and office expense	621,494
Professional and specialized services	877,987
Travel expense	135,336
Other	106,011
	<u>8,044,999</u>
Less — Charges to construction in progress	4,423,767
	<u>3,621,232</u>
Excess of expenses over revenue	(153,813)
Accumulated net revenue at beginning of year	2,292,879
Accumulated net revenue at end of year	<u>\$2,139,066</u>

Debt Service Funds			
	General Obligation Bonds	Sales Tax Revenue Bonds	Combined
Revenue:			
Property taxes	\$33,391,732		\$33,391,732
Transaction and use taxes received		\$24,880,207	24,880,207
Interest	1,129,120	498,693	1,627,813
	<u>34,520,852</u>	<u>25,378,900</u>	<u>59,899,752</u>
Less: Matured interest	35,350,771	4,117,089	39,467,860
Matured principal	230,000		230,000
Bond service expense		82,253	82,253
	<u>35,580,771</u>	<u>4,199,342</u>	<u>39,780,113</u>
	(1,059,919)	21,179,558	20,119,639
Balance at beginning of year	17,134,586	1,340,701	18,475,287
Balance at end of year	<u>\$16,074,667</u>	<u>\$22,520,259</u>	<u>\$38,594,926</u>

Statement of Changes in Construction Funds

Fiscal Year Ended June 30, 1971

Total construction funds at beginning of year	\$1,073,331,480
Additions during the year:	
Sales Tax Revenue Bonds:	
Series B, sold in August 1970	50,000,000
Series C, sold in January 1971	50,000,000
U.S. Government grants received	17,333,776
State of California grants received	9,485,400
City of San Francisco contribution	43,224
Accumulated revenue:	
Interest and other	\$19,931,160
Add — Amount transferred from reserve for self-insurance (Note E)	3,329,141
	<u>150,122,701</u>
Total construction funds at the end of year	<u>\$1,223,454,181</u>

Notes to Financial Statements

JUNE 30, 1971

NOTE A — General Obligation Bonds:

In 1962 voters of the member counties of the District authorized a bonded indebtedness totaling \$792,000,000 of General Obligation Bonds, all of which were outstanding at June 30, 1971, with principal maturities from 1972 to 1999. Payment of both principal and interest is provided by the levy of District-wide property taxes. During 1966 City of Berkeley voters formed Special Service District No. 1 and authorized the issuance of \$20,500,000 of General Obligation Bonds for construction of subway extensions within that City. Special Service District No. 1 Bonds amounting to \$11,550,000 were outstanding at June 30, 1971, with principal maturities from 1972 to 1998. Payment of both principal and interest is provided by taxes levied upon property within the Special Service District.

Bond principal is payable annually on June 15 and interest is payable semi-annually on June 15 and December 15 from Debt Service Funds. Principal of \$7,650,000 General Obligation Bonds and \$240,000 Special Service District No. 1 Bonds mature on June 15, 1972. Interest of \$17,403,140 on General Obligation Bonds and \$265,908 on Special Service District No. 1 Bonds is payable on December 15, 1971. The composite interest rate on bonds currently outstanding is 4.14%.

NOTE B — Sales Tax Revenue Bonds:

The 1969 Legislature of the State of California authorized the District to issue revenue bonds totaling \$150,000,000, all of which were outstanding at June 30, 1971, with principal maturities from 1972 to 1981. The Sales Tax Revenue Bonds are secured by a pledge of the proceeds of the Transactions and Use Tax authorized by the 1969 Legislature and from moneys received by the District from other sources, in lieu of Transactions and Use Tax proceeds, if legally made available. The bonds maturing on or after January 1, 1976 are redeemable prior to maturity at the option of the District on various dates at prices ranging from 104% to 100%. The collection and administration of the tax, which became effective April 1, 1970, is performed exclusively by the State Board of Equalization and all taxes are transmitted directly to the appointed trustee for the purpose of paying bond interest semiannually on July 1 and January 1 and principal annually on January 1. Principal of \$8,500,000 matures on January 1, 1972 and interest of \$4,298,400 is payable on July 1, 1971 and on January 1, 1972. The composite interest rate on bonds currently outstanding is 5.61%.

The State Board of Equalization has estimated that the revenue from the Transactions and Use Tax for the period April 1 to June 30, 1971 will be approximately \$6,300,000, of which the trustee had received \$1,500,000 at June 30, 1971.

NOTE C — U.S. Government grants:

The U.S. Government, under grant contracts with the District, provides financial assistance for research, beautification, certain construction projects and transit vehicle procurement. Additionally, the District is administering federal grants to the City and County of San Francisco (CAL-UTG-4) for added features in three Market Street Stations, and a grant to the City of Berkeley (CAL-UTG-9) in connection with the construction of subway extensions within Berkeley. The following grant contracts were in force as of June 30, 1971:

Project — purpose	Maximum grant	Funds received
Beautification grants:		
CALIF-BD-1	\$ 447,953	\$ 360,000
CALIF-B-163	323,000	
CALIF-B-163	521,000	
	<u>1,291,953</u>	<u>360,000</u>
Demonstration grants:		
CAL-MTD-2 (Transit design)	6,157,256	6,157,256*
CAL-MTD-4 (Fare collection)	1,133,333	947,756
CAL-MTD-7 (Transit hardware)	761,568	761,568*
CAL-MTD-14 (Prototype vehicles)	5,000,000	4,500,000
	<u>13,052,157</u>	<u>12,366,580</u>
Capital grants — construction:		
CAL-UTG-6	13,100,000	12,898,000
CAL-UTG-11	13,200,000	13,127,150
CAL-UTG-15	26,000,000	25,941,450
CAL-UTG-19	68,000,000	14,872,575
CAL-UTG-4	19,902,430	1,860,600
CAL-UTG-9	4,733,000	4,733,000
	<u>144,935,430</u>	<u>73,432,775</u>
	<u>\$159,279,540</u>	<u>\$ 86,159,355</u>

*Project completed

NOTE D — State of California grant:

Pursuant to Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California authorized the District to construct the San Francisco-Dakland rapid transit tube and its approaches with State funds. Under Section 30778 of the Code, further modified by an agreement with the State Department of Public Works, the District will reimburse the State for costs of the tube approaches. At June 30, 1971 the District had received \$163,752,700 of which \$55,610,538 is repayable to the State of California for the tube approaches. Reimbursement will be fulfilled by application of a \$16,500,000 credit to the District arising from highway betterments constructed with District funds on State Route No. 24 and by payment of \$1,000,000 on December 31, 1977, and \$2,500,000 annually beginning December 31, 1978.

NOTE E — Reserve for self-insurance:

By resolution of the Board of Directors of the District, a reserve for self-insurance was created in fiscal year 1968-1969 which was modified in the current year to a maximum of \$15 million. Accordingly, the reserve balance at June 30, 1970 of \$20,424,060 was reduced to \$15 million by restoring \$2,094,919 to construction in progress and \$3,329,141 to accumulated revenue of the construction funds.

NOTE F — Construction in progress:

During the year, construction in progress increased as follows:

Balance at June 30, 1970	\$ 898,700,568
Construction	\$131,895,920
Real estate acquired	2,306,187
Utility relocation	2,710,617
General Fund expenses capitalized	4,423,767
Other	894,928
	<u>142,231,419</u>
Less: Rental income and proceeds from sales of real estate	(515,387)
Insurance premiums refunded	(141,500)
Amount transferred from reserve for self-insurance (Note E)	<u>(2,094,919)</u>
	<u>(2,751,806)</u>
Balance at June 30, 1971	<u>\$1,038,180,181</u>

The July 1, 1971 estimate of project costs, based upon information then available, was developed to determine the estimated cost of the rapid transit system at completion. This estimate amounts to \$1,399,841,000 (including \$179,876,000 for the trans-bay tube to be financed by the State of California and \$79,528,000 for transit vehicles to be financed by federal grant funds and other District sources). Presently, the ultimate cost of the system cannot be finally determined, as future economic conditions and possible changes in schedule to match fund availability may have a significant effect on the final cost of the system. It is contemplated that initial operation of the system will begin early in 1972, and that it will be fully operational late in 1972.

REPORT OF INDEPENDENT ACCOUNTANTS

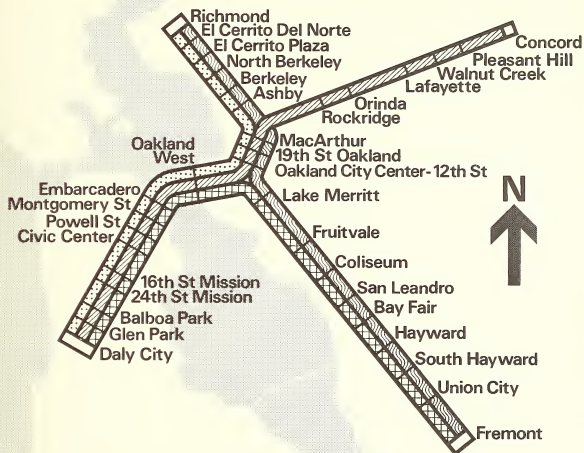
To the Board of Directors of
San Francisco Bay Area Rapid Transit District

In our opinion, the accompanying balance sheet and the related statements of revenue, expenses and accumulated net revenue and changes in construction funds present fairly the financial position of San Francisco Bay Area Rapid Transit District at June 30, 1971 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

San Francisco
August 13, 1971

Price Waterhouse & Co.

TRAIN ROUTES



Routes

Monday-Saturday

Nights and Sunday

Concord-Daly City



through service

Richmond-Daly City



through service

transfer at MacArthur

Richmond-Fremont



through service

Fremont-Daly City



through service

transfer at 12th St.-Oakland

Richmond-Concord

transfer at MacArthur



1971-72

1971-72



ANNUAL
REPORT



San Francisco Bay Area Rapid Transit District

Established by the State of California in 1957. Authorized to finance, construct and operate a new high-speed rail rapid transit system under the direction of a representative Board of Directors from the counties of Alameda, Contra Costa and San Francisco.

DIRECTORS

ALAMEDA COUNTY



ARNOLD C. ANDERSON



RICHARD O. CLARK



H. R. LANGE



GEORGE M. SILLIMAN
President

CONTRA COSTA COUNTY



NELLO J. BIANCO



JAMES P. DOHERTY



DANIEL C. HELIX*



JOSEPH S. SILVA

SAN FRANCISCO CITY AND COUNTY



WILLIAM C. BLAKE



WILLIAM H. CHESTER
Vice President



THOMAS F. HAYES**



WILLIAM M. REEDY

OFFICERS

B. R. STOKES
General Manager
L. D. DAHMS
Assistant General Manager-
Planning & Public Service
D. G. HAMMOND
Assistant General Manager-
Operations & Engineering
L. A. KIMBALL
Assistant General Manager-
Administration
M. BARRETT
General Counsel
W. F. GOELZ
Director of Finance
R. J. SHEPHARD
Secretary

DEPARTMENT HEADS

W. E. BENEDICT
General Services
C. K. BERNARD
Research
D. DELIRAMICH
Treasury
W. F. HEIN
Planning
L. J. HOAGLAND
Insurance & Safety
D. H. KELSEY
Public Information
R. D. KNAPP
Systems
P. H. MATTSOON
Passenger Services
J. R. McCALLUM
Controllorship
W. D. MERSEREAU
Real Estate
G. B. OLSEN
Personnel
E. J. RAY
Operations
E. A. TILLMAN
Engineering & Construction

*Director Helix succeeded Director Stanley T. Grydyk by appointment of Contra Costa County Mayors Conference October 28, 1971.

**Director Hayes succeeded Director Garland D. Graves by appointment of San Francisco Mayor Joseph Alioto February 29, 1972.



GEORGE M. SILLIMAN

PRESIDENT'S MESSAGE

On the morning of June 8, 1972, Director Anderson and myself boarded a BART train northbound out of Fremont Station. Exactly 28 minutes later, we stepped off the train at the Lake Merritt Station in downtown Oakland where our beautiful new District Headquarters is located. Ten minutes later I called the regular semi-monthly meeting of the District Board of Directors to order in its new chambers. I informed my fellow Directors that, as of that morning, BART had commenced pre-revenue train operations. This meant that, for the first time, multiple BART trains had commenced circulation around the 12-station loop between Fremont and MacArthur Stations on regular revenue service schedule.

Thus, did Director Anderson and myself lay claim to being the first "commuters" to travel to work via BART.

Such events are of small moment, perhaps. But I freely admit to a certain boyish pride in them because they represent progress toward opening the system which I've been a part of since the District was established in 1957. Indeed, this same pride has been evident among a succession of tough-minded BART Directors over the past 15 years. No matter how divided the Board may find itself over specific issues, no man has ever served as a BART Director without developing a personal pride in the system and its promise for the future of the Bay Area.

I hope the General Manager's report of District activities carried forward during the 1971-72 fiscal year, as set forth in the following pages, will be closely read. It reflects solid accomplishment — not only in the ongoing tasks of activating a brand new transit system — but in newly-emerging areas of responsibility for the District.

For example, development of our interstation fares during the period involved not only extensive financial research and analysis, but soul-searching into broad social implications of fare discounts for certain groups. The Board's approval of a 75 percent discount for senior citizens and youths obviously represented a subsidy to these groups. It of course raised the question of what groups should be subsidized and who should pay the subsidy. In the interests of equity for BART's regular patrons, we will make every effort to subsidize fare discounts through

gasoline sales tax monies soon to become available for public transit, or other possible sources.

Another example of the District's involvement in broad social issues is the development of positive, progressive policies for minority group representation within the District staff. BART's success in raising the overall minority representation within the staff has earned the respect of minority groups. Yet, they remind us that work remains, not in terms of numbers, but in terms of training programs and other policies to qualify minority employees for higher level jobs.

The District's two major contractors have had setbacks during the period which delayed the target date for start-up of revenue service between Fremont and north Oakland. A nine-week strike and other delays at Rohr Industries delayed that firm's schedule of revenue car deliveries. Other strikes continue to disrupt BART construction schedules. Westinghouse Electric Corporation is encountering technical problems in preparing its automatic train control system for full revenue service.

In view of these problems, the District staff is to be doubly commended for its efforts in adhering to a tight schedule to commence revenue service to the public at the earliest feasible time, shortly after the end of the 1971-72 fiscal year. Much has been asked of the staff in the way of long working hours under difficult circumstances — and they have given as much as anyone could expect of them.

I wish also to commend my fellow directors for their complete dedication to problems of increasing scope and complexity during the period. Their desire to develop a genuine working relationship with AC Transit for feeder bus operations . . . their cooperative attitude toward the Metropolitan Transportation Commission . . . their involvement in various extension studies throughout the District . . . these are but a few examples of broadening responsibilities which BART Directors have shouldered in a wise and tempered manner.

GEORGE M. SILLIMAN
President

REPORT OF THE GENERAL MANAGER



B. R. STOKES

ENGINEERING AND CONSTRUCTION

The construction work completed during this fiscal year proceeded smoothly and according to schedule. Cleanup of construction areas, allowing a return to normal traffic movement, makes major progress on the system particularly evident for the period.

Construction: The period closed with construction complete on major line and station structures along 70 of the 71.6 miles of BART trackway with remaining work expected to be complete by January, 1973. Of the 34 BART stations, 31 are complete, including architectural finish. Construction on the three remaining stations stood at 76% for Daly City, 91% for Concord, and 99.5% for Phase I (shell only) of the Embarcadero Station. Overall design of the BART project was more than 99 percent complete and construction was more than 80 percent complete at the end of the report period. Also, finish work for the San Francisco Municipal railway levels of the Civic Center, Powell and Montgomery Street stations continued.

Contracts: Construction and construction-related procurement contracts, including transit vehicles, now total in excess of

\$917 million in award value, with construction contracts presently underway employing over 850 men locally. Of 186 contracts completed in the project, 59 were accepted during the period. Contracts underway total 117, and 38 remaining to be awarded are primarily for work on the outer Market streetcar line, the Coliseum Walkway, and the Embarcadero Station.

Status of systemwide contracts:

Track	100%
Electrification	91
Automatic train control	30
Parking lots, landscaping	54
*excludes Muni line.	

Status of all civil structure contracts for each line:

A Line (S. Alameda County)	100%
K Line (Oakland Subway)	99.4
C Line (Concord)	99
R Line (Richmond)	99.5
B Line (Transbay Tube)	98
S Line (SF BART/Muni Subway)	82
S Line (outer Market Muni)	35
M Line (Mission-Daly City)	98

Other Projects: Design activities included supervision of Hallidie Plaza, Embarcadero Station, Coliseum Walkway and structures to increase station parking. A number of other smaller projects were carried forward, such as bicycle racks, BART/AC transfer machines and pathfinder signs. Of 15 such contracts authorized during the year, 12 have been awarded.

Federal grant projects totaling more than \$100 million were formulated during 1971/72 and Federal funding for \$61 million had been approved at year's end. A Federal grant of \$1 million was approved to implement the elevated walkway from the Coliseum Station to the Oakland Coliseum Complex. BART's success in obtaining these grants reflects District-wide teamwork in developing requirements and applications as part of BART's Federal involvement in urban mass transit.

OPERATIONS

Operations intensified pre-revenue activities and assumed an increased responsibility for system maintenance in the transition from construction to the operation of the system.

Vehicles: During the fall of 1971 the first extensive prototype car testing program in the history of the transit industry was concluded. This program, lasting 15 months, included more than 10 thousand hours of intensive testing to prove out every aspect of the car design. As a result, many improvements were incorporated in the revenue cars. Improved quality and overall performance of the new vehicles, which came through after settlement of the Rohr strike,

was evident.

Accumulated delays have set Rohr approximately one year behind schedule. The most serious delay in car production was caused by a work stoppage at Rohr's Chrysler Vista plant. The strike itself lasted nine weeks (November 29 through January 3), but it caused a much longer delay in manufacturing, as many new workers had been trained to replace those lost during the stoppage.

After resuming production, deliveries of revenue service cars accelerated. By the end of June, twenty cars had been delivered and two per week were coming off the line. Thirteen of the twenty cars were provisionally ready for use in train circulation testing on the Southern Alameda County Line prior to revenue service.

Train Control System: Pre-revenue testing began on June 8. Westinghouse continued circulation tests and checkout of station wayside equipment on the Southern Alameda line while assisting PBTB/BART personnel in training of operations personnel. A number of technical problems were identified and remedied during this period.

For example, under certain circumstances an electrical interference or "cross-talk" between track circuits took place between adjacent transmitters if positioned opposite each other. Electrical interference between on-board train control components was another troublesome problem. Rewiring and frequency conversion of all station, wayside and on-board equipment on the A-K line necessary to remedy the problems is scheduled for completion by Westinghouse in August. Multiple-train testing will then commence along the entire 12-station loop.

Programming corrections and hardware modifications at Central Control were begun to increase total system control capacity. Two additional computers were installed by Westinghouse to assure accurate data processing capability in BART for full system operation.

At period's end the train control and communications contract was 30% complete.

Other Projects: IBM's manufacturing and installation contract for automatic fare collection equipment was 70% complete by June. All East Bay stations, except Concord, were fully equipped with machines ready for revenue service.

With training from Rohr and Westinghouse, BART employees have been taken over repair, maintenance and operational equipment—vehicles, wayside equipment, central control and programming. Train attendants, Station Agents, Telephone Information and other employees received special training for contact with the public in addition to job training.

The Security Division was authorized to implement a pre-revenue plan developed with the assistance of an outside consultant. An interim security plan for the first 90 days of revenue service was prepared for the Board of Directors and submission to local law enforcement agencies.

BART responsibility for system maintenance of vehicles, track, structures, tunnels, electrification and voice communications equipment increased as contract work was completed in these areas. By the end of the fiscal year, 60% of the maintenance force and 15% of the transportation personnel needed for full system service were hired.

PLANNING AND RESEARCH

Activity in this area continues to increase. The work aimed at planning future system extensions and increasing the efficiency of the existing system for patrons when revenue service commences.

Marketing: The comprehensive fares analysis—the complex process of presenting all competitive marketing and economic options regarding fares—was presented in a final report in December. In the proposed schedule, fares for all trips were calculated according to a standard formula incorporating distance travelled and scheduled speed as the two fundamental aspects of BART service. On December 20, as its last major action of the year, the Board of Directors adopted the initial BART Interstation Fare Schedule and commenced developing an off-site ticket sales program. On January 10, 1972, the Board adopted a 75% discount from the regular fare for senior citizens over 65, and youths through age 12.

The off-site ticket sales program was developed during the spring. Negotiations are carried on with the Bay Area banking industry to reach agreement for commercial links to be the distribution channel for these sales.

Work increased in market research and marketing projects. Examples of such projects included a parking lot control system at Lake Merritt and Coliseum stations, and procedures for handling patron problems arising with the fare collection system.

Feeder Service: Interim agreements were reached with AC Transit to coordinate transit systems and feeder service, and negotiations were underway with San Francisco Municipal Railway.

Studies, in cooperation with local transit agencies, were completed to implement local feeder service in Central Contra Costa County and in Eastern and Southern Alameda County. BART also pledged itself to seek new state funding to provide express bus services from Concord to Pittsburg, Antioch, Brentwood and Martinez; from Bayfair to



*Above: After December opening, new BART headquarters was a major attraction in Oakland.
Below: Southbound train approaches Fruitvale Station on aerial line.*





January open house drew 4500 District employees and their families to inspect BART headquarters and ride train from Lake Merritt Station.

BART President during 1971, James P. Doherty, accepts key to city from Oakland Mayor John H. Reading at dedication of District headquarters December 16.

Harold Willson (lower right), BART consultant for handicapped facilities, introduces Eric Staley, 1972 Easter Seal Society poster boy, to system. Eric, 7, is son of BART analyst Earl Staley.



Pleasanton and Livermore; and north to Richmond.

Extension Projects: The San Francisco Airport Access Project (SFAAP), in which BART participated with San Francisco County and County and San Mateo County, completed its final report during the fall. The report recommended that: (1) BART could be extended to serve the Airport and ultimately should be extended through San Mateo County; and (2) negotiations should proceed immediately between San Mateo, San Francisco and BART to develop an acceptable implementation agreement. By the fiscal year's end the sponsoring agencies had entered into implementation discussions.

Four corridor transit extension projects were underway, and the Oakland Airport Transit Access Project moved into its second phase of study during the year. By 1973 the specific method of transit access to the Oakland Airport will be decided upon.

The State in 1972 enacted the M. S. Alquist-Dedda Act (S.B. 325) which will make state gasoline sales tax monies available to transit. With the State Business and Transportation Agency and the Metropolitan Transportation Commission, BART began developing procedures for utilizing these continuous revenues, estimated at approximately \$19 million annually in the two BART counties.

In the next fiscal year Planning and Research will continue to coordinate these and other projects and contribute to BART's transition to the dynamics of proving, promoting and extending transit service as an essential element within the Bay Area.

FINANCE

Systemwide cash collection procedures were developed and tested. Activity also included beginning construction of the permanent cash building, design of three armed trucks, and recruiting and training of cash handling personnel.

Specifications were prepared for the cash collection data acquisition system. This system will automatically transmit to a central computer information about earned revenue, amounts of cash collected in the fare areas, changes, and origin and destination of passengers.

The computerized Management Information System was implemented with multiple subsystems including Labor and Equipment Distribution, and Budget, among others. The emphasis shifted from project construction to system maintenance and improvement, 11 different series of user manuals were produced and distributed.

Internal audits focused on contract cases, inventory control, fixed asset information.



nion, and payroll/personnel system functions. Fare collection operations and computerized systems functions will demand increased audit activity in the 1972/73 fiscal year.

Total refunds under the property insurance program and dividends from Workmen's Compensation insurance to date exceed \$4.5 million.

During the period the District received additional grants from the U.S. Government or financial assistance to three projects: \$20 million to help complete the Embaradero Station, \$1 million for the Coliseum aerial Walkway and \$89,065 for beautification of areas in Oakland and Berkeley. Capital Grant Project CAL-UTG-11 consisting of our construction contracts was completed during the year.

Earnings on temporary investment of District general construction funds exceeded 12 million for the year.

Property tax rates fixed by the District assed their peak during the 1971/72 fiscal year as predicted (see table below) and will continue to decline until redemption of \$792 million in construction bonds is completed.

PROPERTY TAX RATES

	1972-73		1971-72	
	Admin. Expenses	Debt Service	Total Rate	Total Rate
Alameda	4.7	54.0	58.7	62.5
San Francisco	5.0	56.4	61.4	65.7
San Francisco	5.3	59.8	65.1	70.4

OTE: Tax rate is per \$100 assessed property value. Different tax rates reflect equalization of different assessment formulas among counties.

ADMINISTRATION

The scope of administrative activity continued to increase, as revenue operations approached. A major administration project during the year was equipping and furnishing the new administration building in the II, followed by the move of employees from San Francisco to the new building. The move was carried out in stages during the month of December. The headquarters building, which stands above the Lake Merritt Parkway Station and Train Control Center in downtown Oakland, was formally dedicated and opened on December 16.

The 1972/73 budget — the District's first II system operating budget — was cited by the Administration Committee in the spring as the most carefully developed budget ever come before them. The budget was set at \$26.2 million with a \$20 million spending limit subject to change by the Board, pending on experience with initial revenue operations. The budget provides for a peak of 1558 employees, but this number is expected to decrease to 1515 after a year full stabilized operations.

Manpower planning and long-range cash flow projections of revenues and operating

costs were developed for the next five years. The long-range budget goal is to ensure quality service, safety and maintenance, while enabling BART to support itself through the farebox, as the law requires.

LEGAL

Legal activity reflected the increased demand for advice on operational matters. Review of construction contracts decreased, but this was more than offset by a heavier volume of litigation resulting from increased contract settlements. Staff attorneys were, at the end of the reporting period, handling actual litigation of contract claims aggregating approximately \$1,386,500, in addition to a significant volume of stop notice and other cases.

PERSONNEL

The District was called on during the period to substantially enlarge its staff, maintain its proficiency, and also develop new lines of communication and programs for hiring the disadvantaged. Qualified applicants from members of minority groups were actively sought.

Total District personnel increased from 527 to 762 during the year, of which 313 were hourly employees. The staff processed 4,500 applications, conducted 1,600 interviews, answered 23,600 telephone inquiries, and talked to 5,600 drop-in applicants.

Minority representation among the staff is now up to 307. Of this group, 20% are in executive, supervisory and professional positions. On January 27 the San Francisco Human Rights Commission presented a commendation to the Board of Directors for its positive policy on fair employment practices.

Districtwide benefits were improved with the addition of employer paid dental coverage for dependents.

Hourly employees were incorporated into the Public Employees Retirement System during the year.

BART executive salaries were surveyed by a consultant firm selected by the Administration Committee of the Board in order to check their comparability with similar executive positions in other public and private organizations. As a result of the survey, BART ranges were adjusted to a competitive level. However, the General Manager informed the Board that he would not recommend individual salary increases in the executive group until after the start of revenue service. The staff was commended by the outside consultant for high professionalism in salary administration.

LABOR RELATIONS

Activities during the fiscal year were principally directed toward establishing the framework which will largely determine the District's future labor relations program. An

extensive series of hearings was held in 1971 before arbitrator Sam Kagel into two areas critical to District operations.

Thirteen hearings involved procedures for determining appropriate collective bargaining units among those District employees who may desire to be represented by organized labor. Seven hearings were held to determine how Section 13(c) of the Urban Mass Transportation Act would be applied to BART. This section, signed by BART on January 25, 1968, as a condition of Federal aid, guarantees employees of other Bay Area transportation lines job priority in transit jobs with BART.

On June 18, Mr. Kagel placed a four-week hiring freeze on BART while he polled employees of five other transportation lines ruled eligible under Section 13(c) for BART job preference. Employees from Peerless Stages, Greyhound Bus Lines, AC Transit, San Francisco Municipal Railway, and Southern Pacific Railway's commuter lines were given hiring preference in BART.

Mr. Kagel is expected to rule on labor unit representation during the 1972/73 fiscal year. The District staff is preparing for the elections and collective bargaining process expected to follow his ruling. Thus, the 1972/73 fiscal year will be a critical one in terms of labor's financial and operating impact on the District.

REAL ESTATE

Property acquisition completed during this period involved requirements for 33 parcels at a cost of \$380,000. Income obtained from property rentals, leases and sales amounted to \$494,000. Property requirements identified during the year affect 13 new parcels.

Significant progress was made in fulfilling contractual property commitments to utility agencies for facilities rearranged during BART construction. Conveyances of new and relocated street areas were processed involving the cities of Oakland, Berkeley and Hayward.

The functions of right of way surveying, mapping and certification were transferred from PBTB to BART. Progress continued on the preparation and filing of BART right of way record maps with County Recorders.

Work will continue during the coming year in the fields of property acquisition, condemnation, relocation, street and utility conveyances and street vacations for the 75-mile system. Right of way estimates will be provided for various system extension projects. The customer service program will be initiated — involving public telephones, storage lockers, vending machines, newspaper vending boxes, mail boxes, and bicycle lockers at BART stations. Finally, encouragement will continue to planners and developers concerned with property developments oriented toward the BART system. •

San Francisco Bay Area Rapid Transit District

Balance Sheet

	June 30	
	1972	1971
Assets		
Cash (including time deposits of \$109,200,000 and \$154,000,000)	\$ 109,468,936	\$ 155,106,373
U.S. Treasury securities—at cost (approximating market)	12,265,391	15,417,812
Federal Agency securities—at cost (approximating market)	46,651,410	87,039,467
Miscellaneous receivables	3,352,221	3,014,625
Deposits and notes receivable	24,372,459	4,387,364
Construction in progress (Note G)	1,141,867,278	1,038,180,181
Facilities, property and equipment—at cost	3,298,317	435,495
Materials and supplies	406,411	—
Debt Service Funds, net assets (including time deposits of \$30,149,600 and U.S. Treasury and Federal Agency securities of \$21,585,700 in 1972 and \$23,731,900 and \$14,767,440 in 1971) (Notes B and C)	52,566,594	38,594,926
	<u>\$1,394,249,017</u>	<u>\$1,342,176,243</u>
Liabilities, Reserve and Capitalization		
Construction contracts and others	\$ 17,218,669	\$ 23,877,532
Payable to State of California (Note E)	39,110,538	39,110,538
Debt Service Funds (Notes B and C)	52,566,594	38,594,926
Reserve for self-insurance (Note F)	15,000,000	15,000,000
Capitalization:		
Construction funds:		
General Obligation Bonds (\$812,500,000 authorized) (Note B):		
Bonds outstanding	795,660,000	803,550,000
Bonds matured and retired	8,340,000	450,000
	<u>804,000,000</u>	<u>804,000,000</u>
Sales Tax Revenue Bonds (\$150,000,000 authorized) (Note C):		
Bonds outstanding	141,500,000	150,000,000
Bonds matured and retired	8,500,000	—
	<u>150,000,000</u>	<u>150,000,000</u>
U.S. Government Grants (Note D)	113,909,977	86,159,355
State of California Grant (Note E)	112,756,462	108,142,162
City of San Francisco contribution	3,428,022	3,529,758
	<u>1,184,094,461</u>	<u>1,151,831,275</u>
Accumulated revenue	84,391,568	71,622,906
	<u>1,268,486,029</u>	<u>1,223,454,181</u>
General Fund accumulated net revenue	1,867,187	2,139,066
	<u>1,270,353,216</u>	<u>1,225,593,247</u>
	<u>\$1,394,249,017</u>	<u>\$1,342,176,243</u>

Statement of Revenue, Expenses and Accumulated Net Revenue

General Fund

	Fiscal Year Ended June 30	
	1972	1971
Revenue:		
Taxes	\$ 3,589,561	\$ 3,381,687
Interest and other	79,650	85,732
	<u>3,669,211</u>	<u>3,467,419</u>
Expenses:		
Personal services	9,269,871	6,304,171
Rent, leased vehicles and office expense	628,155	621,494
Professional and specialized services	1,183,004	877,987
Travel expense	167,569	135,336
Other	1,338,749	106,011
	<u>12,587,348</u>	<u>8,044,999</u>
Less charges to construction in progress and others	8,646,258	4,423,767
	<u>3,941,090</u>	<u>3,621,232</u>
Excess of expenses over revenues	(271,879)	(153,613)
Accumulated net revenue at beginning of year	2,139,066	2,292,879
Accumulated net revenue at end of year	<u>\$ 1,867,187</u>	<u>\$ 2,139,066</u>

Debt Service Funds

	General Obligation Bonds	Sales Tax Revenue Bonds	Fiscal Year Ended June 30	
			1972	1971
			Combined	Combined
Revenue:				
Property taxes	\$43,931,781		\$43,931,781	\$33,391,732
Transaction and use taxes received		\$27,769,713	27,769,713	24,880,207
Interest	986,462	1,346,672	2,333,134	1,627,813
	<u>44,918,243</u>	<u>29,116,385</u>	<u>74,034,628</u>	<u>59,899,752</u>
Less:				
Matured interest	35,338,121	8,304,853	43,642,974	39,467,860
Matured principal	7,890,000	8,500,000	16,390,000	230,000
Bond service expense		29,986	29,986	82,253
	<u>43,228,121</u>	<u>16,834,839</u>	<u>60,062,960</u>	<u>39,780,113</u>
	1,690,122	12,281,546	13,971,668	20,119,639
Balance at beginning of year	16,074,667	22,520,259	38,594,926	18,475,287
Balance at end of year	<u>\$17,764,789</u>	<u>\$34,801,805</u>	<u>\$52,566,594</u>	<u>\$38,594,926</u>

Statement of Changes in Construction Funds

	Fiscal Year Ended June 30	
	1972	1971
Total construction funds at beginning of year	\$1,223,454,181	\$1,073,331,480
Additions during the year:		
Sales Tax Revenue Bonds:		
Series B, sold in August, 1970	—	50,000,000
Series C, sold in January, 1971	—	50,000,000
U.S. Government grants received	27,750,622	17,333,776
State of California grants received	4,614,300	9,485,400
City of San Francisco contribution (adjustment)	(101,736)	43,224
Accumulated revenue (primarily interest)	12,768,662	23,260,301
	<u>45,031,848</u>	<u>150,122,701</u>
Total construction funds at end of year	<u>\$1,268,486,029</u>	<u>\$1,223,454,181</u>

Notes to Financial Statements

Year ended June 30, 1972

NOTE A — Summary of Significant Accounting Policies:

The San Francisco Bay Area Rapid Transit District is a political subdivision of the State of California created by the Legislature in 1957 and regulated by the San Francisco Bay Area Rapid Transit District Act, as amended. The District does not have stockholders or equity holders and is not subject to income tax. The disbursement of all funds received by the District is controlled by statutes and by provisions of various grant contracts entered into with the State of California and the United States Government.

The general fund receives an allocation of property tax revenues for purposes of providing for administrative expenses not involving construction in progress.

The cost of acquisition and construction of rapid transit facilities is recorded in construction in progress and represents amounts paid or owing to contractors including amounts provided by State and Federal grants for construction purposes. As facilities are completed, it is the intention of the District to transfer them to facilities, property and equipment accounts.

In accord with a predominant accounting method in the industry, the San Francisco Bay Area Rapid Transit District does not provide depreciation on facilities, property and equipment. Accounting policies for general obligation bonds (Note B), sales tax revenue bonds (Note C), government grants (Notes D and E), reserve for self-insurance (Note F) and construction in progress (Note G) are described in separate footnotes.

During the construction phase, the District has elected to present a statement of changes in construction funds instead of a statement of changes in financial position.

Certain reclassifications have been made in the 1971 financial statements to conform to the classifications in 1972.

NOTE B — General Obligation Bonds:

In 1962, voters of the member counties of the District authorized a bonded indebtedness totaling \$792,000,000 of General Obligation Bonds. Bonds amounting to \$784,350,000 were outstanding at June 30, 1972, with principal maturities from 1973 to 1999. Payment of both principal and interest is provided from the levy of District-wide property taxes. During 1966, City of Berkeley voters formed Special Service District No. 1 and authorized the issuance of \$20,500,000 of General Obligation Bonds for construction of subway extensions within that City. Special Service District No. 1 Bonds amounting to \$11,310,000 were outstanding at June 30, 1972, with principal maturities from 1973 to 1998. Payment of both principal and interest is provided from taxes levied upon property within the Special Service District.

Bond principal is payable annually on June 15, and interest is payable semiannually on June 15 and December 15 from Debt Service Funds. Principal amounts of \$9,100,000 in General Obligation Bonds and \$250,000 in Special Service District No. 1 Bonds mature on June 15, 1973. Annual maturities in succeeding years are in greater amounts. Interest of \$17,189,265 on General Obligation Bonds and of \$259,308 on Special Service District No. 1 Bonds is payable on December 15, 1972. The composite interest rate on bonds currently outstanding is 4.14%.

NOTE C — Sales Tax Revenue Bonds:

The 1969 Legislature of the State of California authorized the District to issue revenue bonds totaling \$150,000,000. Bonds amounting to \$141,000,000 were outstanding at June 30, 1972, with principal maturities from 1973 to 1981. The Sales Tax Revenue Bonds are secured by a pledge of the proceeds of the Transactions and Use Tax authorized by the 1969 Legislature. The bonds maturing on or after January 1, 1976 are redeemable prior to maturity at the option of the District on various

dates at prices ranging from 104% to 100% of the principal amount. The collection and administration of the tax, which became effective April 1970, is performed exclusively by the State Board of Equalization. All taxes collected are transmitted directly to the appointed trustee for the purpose of paying bond interest semiannually on July 1 and January 1, and principal annually on January 1. Principal amounts of \$13,600,000 mature on January 1, 1973 (with greater annual amounts thereafter). An interest of \$4,000,900 is payable on July 1, 1972 and on January 1, 1973. The composite interest rate on bonds currently outstanding is 5.59%.

The State Board of Equalization has estimated that the revenue from the Transactions and Use Tax for the period from April 1 to June 30, 1972, will be approximately \$6,800,000, of which the trustee had received \$1,550,000 at June 30, 1972.

NOTE D — U. S. Government Grants:

The U. S. Government, under grant contracts with the District, provides financial assistance for research, beautification, certain construction projects and transit vehicle procurement. Additionally, the District is administering federal grants to the City and County of San Francisco (CAL-UTG-4) for construction of three Market Street Station mezzanines, two street plazas and street extensions, and a grant to the City of Berkeley (CAL-UTG-9) in connection with the construction of subway extensions within Berkeley. The following grants were in force as of June 30, 1972:

Project—Purpose	Maximum Grant	Funds Received
Beautification Grants:		
CALIF-80-1	\$ 447,953	\$ 360,000
CALIF-B-160	323,000	239,000
CALIF-B-163	521,000	
OSD-CA-09-39-1074	89,065	
	<u>1,381,018</u>	<u>599,000</u>
Demonstration Grants:		
CAL-MTD-2 (Transit Design)	6,157,256	6,157,256
CAL-MTD-4 (Fare Collection)	1,133,333	947,300
CAL-MTD-7 (Transit Hardware)	761,568	761,300
CAL-MTD-14 (Prototype Vehicles)	5,000,000	4,500,000
	<u>13,052,157</u>	<u>12,366,000</u>
Capital Grants—Construction:		
CAL-UTG-6	13,100,000	12,867,000
CAL-UTG-11	13,103,910	13,103,910
CAL-UTG-15	26,000,000	25,941,300
CAL-UTG-19	88,000,000	36,943,300
CAL-UTG-4	19,902,430	7,354,000
CAL-UTG-9	4,733,000	4,733,000
CAL-UTG-47	1,000,000	
	<u>165,839,340</u>	<u>100,944,700</u>
	<u>\$180,272,515</u>	<u>\$113,909,700</u>

*Project completed

NOTE E — State of California Grant:

Pursuant to Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. Under Section 30778 of the Code, further modified by an agreement with the State Department of Public Works, the District will reimburse the State for costs of these approaches. At June 30, 1972, the District had received \$168,367,000 of which \$39,110,536 is repayable to the State of California for the approaches (after application of a \$15,500,000 credit to the District) arising from highway betterments constructed with District funds on State Route No. 24) by payment of \$1,000,000 on December 31, 1977 and \$2,500,000 annually beginning December 31, 1978.

NOTE F — Reserve for Self-Insurance:

By resolution of the Board of Directors of the District, the reserve for self-insurance is presently limited to a maximum of \$15 million to provide for uninsured general liability and workmen's compensation purposes as of June 30, 1972.

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

This Annual Report for the period July 1, 1971 to June 30, 1972 is published by the District pursuant to Article 28770 of the State of California Public Utilities Code. District Headquarters are located at 800 Madison Street, Oakland, California 94607. Telephone 415-465-4100.

NOTE G — Construction in Progress:

During the year, the net change in construction in progress was as follows:

Balance at June 30, 1971	\$1,038,180,181
Additions:	
Construction	\$ 96,252,405
Real estate acquired	370,497
Utility relocation	2,011,065
Pre-full revenue operating expenses	8,582,430
Other	178,204
	<u>107,394,601</u>
Less:	
Rental income and proceeds from sales of real estate	(428,586)
Insurance premiums refunded	(33,171)
Transfers to facilities, property and equipment	(2,882,839)
Transfers to materials and supplies	(362,908)
	<u>(3,707,504)</u>
	103,687,097
Balance at June 30, 1972	<u>\$1,141,867,278</u>

estimate of project costs, based upon information available at July 1, 1972, was developed to determine the estimated cost of the rapid transit system at completion. This estimate amounts to \$1,424,778,000 (including \$179,878,000 for the trans-bay tube to be financed by the State of California and \$79,860,000 for transit vehicles to be financed by Federal grant funds and other District sources). Presently, the final cost of the system cannot be determined, as future economic conditions, resolution of contract price differences, and possible changes in schedule to match road availability may have a significant effect on the final cost of the system. Initial operation of the system will begin in 1973, and it is expected to be fully operational in 1975.

REPORT OF DEPENDENT ACCOUNTANTS

Board of Directors,
San Francisco Bay Area Rapid Transit District,
Oakland, California.

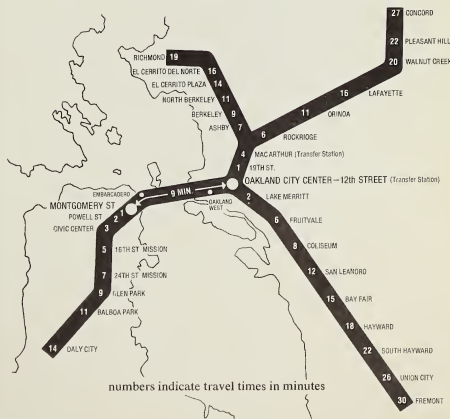
We have examined the balance sheet of the San Francisco Bay Area Rapid Transit District as of June 30, 1972, and the audited statements of revenue, expenses and accumulated revenue and changes in construction funds for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1972, and the results of operations and the changes in construction funds for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

The financial statements for the prior year were examined by independent certified public accountants.

Touche Ross & Co.

San Francisco
August 31, 1972



numbers indicate travel times in minutes

NEW: BART's beautiful new head
quarters in downtown Oakland
housed more than 300 employees
who moved from their former head-
quarters at 814 Mission St. in San
Francisco during December, 1971.

Frontline area is part of passenger
concourse for Lake Merritt Subway
Station. BART's large Train Control
Center lies behind entire wall of plas-
tic mural by artist William Mitchell.

SAN FRANCISCO BAY AREA
RAPID TRANSIT DISTRICT





*San Francisco Bay Area
Transit Authority*



Annual Report 1972|1973

DOCUMENTS

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San Francisco Bay Area Rapid Transit District

Established by the State of California in 1957. Authorized to finance, construct and operate a new high-speed rail rapid transit system under the direction of a representative Board of Directors from the counties of Alameda, Contra Costa and San Francisco.

Directors



ALAMEDA COUNTY

GEORGE M. SILLIMAN
H. R. LANGE
RICHARD O. CLARK
DEWITT C. WILSON*



CONTRA COSTA COUNTY

JAMES P. DOHERTY
JOSEPH S. SILVA
NELLO J. BIANCO
Vice-President
DANIEL C. HELIX



CITY & COUNTY OF SAN FRANCISCO

WILLIAM M. REEDY
WILLIAM H. CHESTER
President
THOMAS F. HAYES
QUENTIN L. KOPP**

OFFICERS

B. R. STOKES
General Manager
L. D. DAHMS
Assistant General Manager-
Planning & Public Service
L. A. KIMBALL
Assistant General Manager-
Administration
M. BARRETT
General Counsel
W. F. GOELZ
Director of Finance
R. J. SHEPHARD
Secretary

DEPARTMENT HEADS

W. E. BENEDICT
General Services
C. K. BERNARD
Research
D. DELIRAMICH
Treasury
W. F. HEIN
Planning
L. J. HOAGLAND
Insurance & Safety
P. O. ORMSBEE
Public Relations
R. D. KNAPP
Systems & Data Processing
C. O. KRAMER
Engineering Services
W. M. McDOWELL
Passenger Service
J. R. McCALLUM
Controllship
W. D. MERSEREAU
Real Estate
C. B. OLSEN
Personnel
E. J. RAY
Operations
E. A. TILLMAN
Design & Construction

* Formerly Director, Intercontinental Junction, Arnold C. Anderson by appointment of the Alameda County Board of Supervisors April 17, 1964.

** Formerly Mayor succeeded Director William C. Blake by appointment of the San Francisco Board of Supervisors January 8, 1974.

President's Message

"... human values
in management, and good
working relationships, have more bearing on
the quality of revenue service
in the long run ..."

On September 11, 1972, a huge construction project was suddenly transformed into the nation's newest transit system. Empty new stations and trains came alive with people. It was a thrill I shall not soon forget.

Thousands of BART District residents and taxpayers poured into the system and quickly made themselves at home on that day, ending the era of building and testing the network, and beginning a new era of public transportation service.

This year's report from the General Manager has been expanded to cover the busiest period in the District's history, and with special emphasis on all matter pertaining to revenue service.

Pre-revenue preparations were seriously hampered by very late revenue car deliveries and last summer's state-imposed hiring freeze. Equipment reliability problems aggravated the shortage of revenue cars. Fleet testing and modification work required a sharply limited schedule of revenue service.

Despite these setbacks, the District staff successfully opened 56 miles of its 71-mile system, and 24 of its 34 stations. Patronage to date, exceeding all reasonable expectations, gives every indication of solid public acceptance of BART!

These achievements tell me a great deal about the caliber of our people: they perform superbly when the going gets tough.

The new responsibilities of revenue service ... equipment start-up problems ... the issues raised by approaching labor contract negotiations ... plus broader social issues being focused on BART ... all combined to make extraordinary demands on the District Directors and staff management during the report period.

These demands will continue through the 1973-74 period as the District and its contractors work to bring the system into readiness for transbay operation. Staff management ably carried out realignment of activities and personnel during the period. This process will continue in the next period as a permanent operating structure evolves.

In addition to the concerns of the new fiscal year, the Directors and staff will doubtless have occasion to reassess decisions from past years,

made under circumstances no longer applicable. Management has, without question, demonstrated an ongoing ability to change, correct and improve — which is vital to every organization.

In addition to an entirely proper and constructive concern about BART from outside parties, a certain mindless criticism of the Directors and staff has become politically fashionable in some quarters. We must not let criticism we regard as unfair ... nor pride, nor conflicting viewpoints ... rob us of objectivity in the continued review of our internal affairs.

In this coming period, we Directors must not let our preoccupation with technical resources cause us to overlook the importance of our people resources. As demonstrated time and time again in the transit industry, human values in management, and good working relationships, have more bearing on the quality of revenue service in the long run than do relatively short-run technical problems.



William H. Chester
President



President Chester chats with
Berkeley Mayor and Mrs. Warren
Widener and other passengers
during the January 29 opening of
the Richmond Line.

Report of the General Manager

TRANSIT OPERATIONS



General Manager B. R. Stokes (right) briefs Dick Brown, chairman of the State Transportation Board and San Diego County Supervisor, on BART's new automatic fare collection equipment.

OPERATING STATISTICS

(September 11, 1972 through June 30, 1973)

Total Car Miles (revenue service only)	4,589,927
Total Passenger Trips (patronage)	4,591,241
Passenger Miles (estimated)	106,771,131
Ridership Ratio: (for June 1973)	
Peak	53%
Off-Peak	47%
Net Passenger Revenues (less value of fare discounts and AC-BART transfer expense)	\$2,103,621
Average Passenger Fare (includes discount fares at full value)	.5293 cents
Average Trip Length (based on average fare)	12.0 miles

The first 10 weeks of the fiscal year were spent in intense, around-the-clock pre-revenue activity to ready the system for the opening of the first 26 miles of the system between Fremont and north Oakland. On Monday, September 11, ceremonies were held simultaneously at the 12 opening stations for 2,000 guests, including local, state and federal officials. At 12 noon, the BART Train Control Center at Lake Merritt announced: "This system is now open for revenue service." Thousands of waiting patrons rushed through the fare gates to ride the first truly new rapid transit system built in the United States in more than a half-century.

Pre-Revenue Operations: Activities included complex and extended testing of transit cars and the automatic train control system between Fremont and MacArthur Stations. Revenue train operation was first simulated on the train control computer, using theoretical run times, which were later compared to actual run times and adjusted in the computer. Procedures for mainline operations, interfacing BART Central Train Control with mainline operations, yard movements, emergencies, and other purposes, were finalized and published.

Pre-revenue train circulation testing was seriously hampered by the continued shortage of revenue service cars, which in turn affected other related pre-revenue activities. (As of July 1, 13 cars were available for testing.) The shortage resulted from a slippage of delivery schedules by the car-builder, Rohr Industries, Inc., which had suffered a crippling nine-week strike.

An equally serious problem was a four-week hiring freeze from June 18 to July 15 imposed on the District by the State. The District was directed to interview 1,100 employees of five Bay Area transit lines to determine how many employees desired (and were qualified) to exercise job preference rights with BART guaranteed by federal legislation. To surmount this delay, an intensive effort was required between mid-July and early September to hire and train the station agents, train operators, maintenance and other personnel required for start-up of revenue service. In this short period, more than 55,000 training hours were administered to new personnel.

Revenue Operations: Service commenced on September 11 with only 24 A-cars and two B-cars available for service. The Transportation Department was able to regularly maintain eight to nine two-car trains on the Fremont-MacArthur loop at 10-15 minute headways. Remaining A-cars were used in back-up trains. Additional B-cars did not begin joining the fleet until well into October.

"The most important sign on the system hangs in the Train Control Center.

It says 'PAMPER THE PASSENGER'."

Transportation carried 100,000 people in the first 4½ days of revenue service, a remarkable accomplishment considering the shortage of cars and newness of the line operation organization. As the initial influx of sightseers or excursion riders passed, daily average ridership began to reflect more accurately the patronage of a new transit market with seasonal characteristics. Ridership levelled off to a 16,000 daily average in October, and then to 12,000 in January.

On January 29, 11 more system miles and six more stations were opened to Richmond. Equipment increased to 12 three- and four-car trains. Daily patronage immediately jumped from 12,000 to 27,000.

On May 21, 19 more system miles and six more stations were opened (from MacArthur Station) to Concord — BART's most scenic line and its showcase of transit/freeway corridor planning. Average daily ridership rose from 28,000 to 36,000 in the line's first week of operation, reaching a peak daily average of 37,000 in June.

Testing, checkout and modifications to the car fleet and control system for full system operation (on optimum headways) comprise a large and ongoing technical effort that must be accomplished on night shifts and on weekends, using system trackage and maintenance facilities. Hence, revenue service was limited to weekdays, 5 a.m. to 8 p.m., and will so continue until some date after full system operation commences.

Despite a limited service schedule, daily ridership rose to 95 percent of that forecasted for the three East Bay lines on a full schedule of 20 hours a day seven days a week. Significantly, commuter patronage rose 38 percent above the forecast for the East Bay lines. By June, 19,500 of the 37,000 daily trips were in the a.m. and p.m. commuter peaks — very close to the 50 percent peak to off-peak ratio forecast for the system.

Heaviest demands on the system's limited capacity were made during three games of the 1972 World Series, when BART moved up to 8,000 passengers per hour with 18 cars. Peak one-day ridership was 40,000 on Washington's birthday (February 19). The system carried more than 4½ million passengers over 106 million miles with no fatalities or serious injuries.

Of BART's initial fleet order of 150 A-cars and 100 B-cars, 148 A's and 71 B's were delivered by period's end. Of these, 108 A's and 59 B's had been provisionally accepted for service. An order was placed with Rohr Industries for an additional 100 B-cars. Work on these cars will commence in early fall when the initial 250-car order is completed.

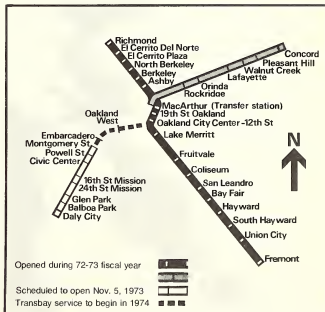
Train yards and maintenance shops at Richmond and Concord were activated to dispatch all revenue service trains on and off the mainline, and to perform scheduled (daily and periodic) maintenance on rolling stock. The main Hayward

Shop thus was able to concentrate on fleet heavy maintenance and component overhaul, as well as equipment testing and modification programs leading to start-up of full (transbay) system operation.

Seasoning of Transportation Department personnel in the operation of trains, Control Center, stations and train yards was evident in improved train operations and response to non-routine situations during the period.

The period ended with three of the system's four lines, 56 of its 71 miles and 24 of its 34 stations in operation. Eighteen trains (four or five cars each) were regularly in revenue service. The District was working to open the remaining 15 miles of the system from downtown Oakland through the transbay tube and San Francisco to Daly City. A key requirement in the train control system for transbay operation (see page 6 for details) was yet to be met. And there was growing threat of a system shutdown by the District's 1,100 union employees. Both factors would, in the next period, further delay the opening of the transbay service.

NOTE: subsequent to June 30, 1973, the system was shut down by a strike for the entire month of July. The map below indicates schedules for opening the remainder of the system, developed after the District resumed revenue operations on August 6, 1973.



System Maintenance: Approximately half the total district personnel are involved in a wide range of 24-hour support activities, from station and right-of-way housekeeping to highly complex maintenance of electronic equipment. Getting acquainted with contractor-installed equipment, and identifying and correcting design or installation deficiencies, characterized much of the period activity. Major effort went into development of test procedures and devices for rapid troubleshooting of transit vehicles, train controls, communications networks, line electrification circuits, emergency alarms and equipment, and other support areas. Fare collection equipment was maintained by the manufacturer, IBM.

A major problem area was unsatisfactory reliability of the vehicles in revenue service, which increased unscheduled maintenance performed at the shops to four times the forecasted workload. Vehicle downtime reached a monthly average of 30 percent of the fleet, with carborne train controls and braking and propulsion systems the major causes of downtime. By period's end, the Hayward Shop was monitoring approximately 85 car modifications requested from Westinghouse Electric Corporation, Rohr Industries, Inc., or their subcontractors. The modifications primarily involved changes or additions to cab controls and signals, door mechanisms, braking and propulsion systems, and ATC (automatic train control) circuitry.

Another major problem area involved wayside equipment malfunctions, which frequently caused the ATC system to falsely "detect" a non-existent train in a given track section or block. Accordingly, the fail-safe system stopped any revenue train that moved into the preceding block. The train operator then had to move his train through the "false occupancy" block on manual control at reduced speed, thereby disrupting running schedules. Replacement of faulty circuits in the wayside equipment was, by period's end, reducing the frequency of false occupancies. Other modifications, such as changes in station stopping circuits and car antenna, added up to a significant improvement in ATC reliability.

The system's elaborate new network of communications and heavy power distribution, extended with each line opening, required considerable work to achieve the required reliability. More than 25 separate communications systems were started up, including radio, telephone, public address systems, and digital communication links used in train control. Similar start-up work was accomplished on the system's third rail circuits and power feeds from PG&E sub-stations, plus a wide range of auxiliary generators and bat-

teries to keep vital parts of the system operable in case of general power failure.

The Inspection Division staff was enlarged to assure complete and uniform reporting of equipment malfunctions and unusual occurrences in train operations to appropriate maintenance, engineering, and contractor areas. Thirty-four inspectors closely monitored the Train Control Center and the Hayward Shop, key points in other system shops, and also Rohr's car-assembly line at Chula Vista, California.

Installation of automatic car wash facilities, similar to those at Hayward Yard, was begun at Richmond and Concord Yards.

The Track and Structures Division performed final alignment and cleaning of rails prior to each line opening. Extensive replacement of defective rail joint insulation, plus stainless steel surfacing of seldom-used crossovers and other trackage, was carried out to help improve ATC system reliability. Crews were trained to manually operate switches (in event of remote control problems) and a variety of mobile equipment used for system maintenance and emergencies. Extensive work was required to correct water leakage in subways and stations and other major and minor deficiencies in new structures. Janitorial crews were trained for each line prior to opening, and system mileposts and other right-of-way signage installed. The Building & Grounds Section moved from the Oakland Shop to rented quarters in the Butler Building at 11 Fourth Street, Oakland.

System Safety: With a period record of zero passenger fatalities and serious injuries, BART more than lived up to the excellent passenger safety record of the rail transit industry. Passenger accident claims, all non-serious, totaled 15 on trains and 58 in stations. Prevention of station accidents will be emphasized in the next fiscal year, with coordinated efforts between safety, police, line operations, and maintenance personnel.

On October 2 the system's only serious train accident occurred. Failure of a tiny crystal oscillator caused on-board control circuitry to transmit an erroneous speed command to the propulsion system of a two-car train approaching the Fremont Station terminus. Although under full braking, the train's overspeed condition resulted in one car leaving the tracks. It passed through a sand barrier, coming to rest on a dirt incline into the station parking lot. A few of the passengers were bruised, but none was seriously injured.

Although electronic engineers consider this type of component failure extremely remote, a program was immediately begun to equip all cars with redundant circuitry to prevent any similar problems in speed coding equipment. The nature of the accident subsequently focused attention on broader concepts of fail-safe design as utilized in BART's train control system and in vital safety control systems elsewhere.

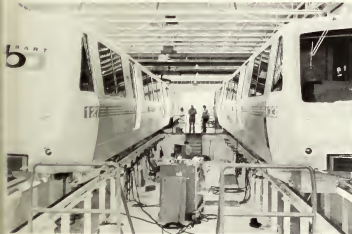
**"Our maintenance people
have met inevitable start-up problems squarely
and with great individual effort."**

Police Services: District policy is aimed at developing a highly professional police organization able to carry out law enforcement on the system within the different social structures of the on-line communities. A major activity of the Police Services Department was the recruiting and training of officers for a low-key, nonmilitary approach to law enforcement. The department has recruited primarily from personnel of Bay Area community police departments, who already have basic experience and professional peace officers status. Officers recruited thus far average 32 years of age, with two years of college and seven years of police experience.

Police Services performs a broad range of activities, including system patrol (in automobiles or on trains), and investigation work. BART officers work closely with the community law enforcement agencies, and a number of wanted persons have been apprehended as a result.

Crimes on the system mainly involved automobile and bicycle thefts, with crimes against persons very minimal. Rock-throwing at trains and other juvenile vandalism continues as a persistent problem for which there is no simple solution. However, District personnel are working with schools and civic organizations in an attempt to improve the situation.

The department's major task in the coming period will be to prepare for the San Francisco line operation with its large ridership and station activity.



Hayward Shop crews (left and above) worked around the clock seven days a week to maintain and modify revenue cars, and check out new vehicles arriving from factory. Richmond and Concord Shops were activated during period. (Right) Supervisors Al Bullock and Bob Roney monitor computerized routing of busy Hayward Yard traffic from control tower.



SYSTEM ENGINEERING

Bringing the new transit vehicles and train control system to performance and reliability levels required for full system (transbay) operation continued as a major challenge during the period. Extensive testing and design evaluation programs were carried on by the consortium of District engineers, consultants, and equipment suppliers.

Testing: Thorough testing of revenue vehicles, train controls, system communications, and other equipment preceded each of the three line openings. As equipment problems were identified and corrections implemented, pre-revenue testing went progressively smoother for each line opening.

Nevertheless, at period's end the District was still working to meet a key requirement of the California Public Utilities Commission calling for continuous detection of "dead" two-car trains (i.e., without third-rail power) throughout the system. Although the control system reliably detects powered trains in normal operations, the requirement is intended to assure safe train spacing under the most adverse circumstances of complete power failure.

To doubly assure safe spacing of trains on automatic control, the CPUC has required the District to monitor all train movements with station platform-to-station platform telephone communication since revenue service commenced. This requirement will continue until the "dead train"

detection is achieved. Until the requirement is lifted, however, the telephone back-up operation precludes the closer train spacing considered necessary for efficient transbay operation.

Design: Vehicle and train control reliability problems, plus the October 2 train accident at the Fremont Station, centered largely around electronics. As such, the period involved extensive evaluations of vehicle and train control design concepts, particularly with regard to fail-safe design of vital circuitry and components.

On November 9, State Legislative Analyst A. Alan Post issued a report to California legislators which contained 15 recommendations pertaining to system equipment and operating safety, and 16 recommendations pertaining to District contract administration, bidding, and procurement procedures.

As a follow up to the Post report, a three-man panel of experts was appointed by the State Senate Public Utilities and Corporations Committee to investigate the train control system. On February 5, the panel reported to the legislature that current BART operations were safe, and would continue to be safe for future transbay service with the addition of certain modifications and back-up systems.

Among the panel's 21 recommendations were additional redundant (duplicate) vital circuitry in cars and control equipment, added cab information for train operators, testing for "worst weather" braking, and continued testing of car wheel "scrubbers."

The District staff has since worked closely with the panel, and change orders have been issued for vehicle and train control modifications agreed upon. The "scrubbers" (metal rubbing blocks that keep car wheels clean) generally improved train detection by improving wheel-to-track contact. However, the test results still did not fulfill the CPUC's stringent "dead train" detection requirement, and other methods of improving detection were being investigated.

Of major importance was the consolidation of all system equipment engineering and contract administration into a new Engineering Services Department. A new Quality Control Department was also established to centralize reporting and analysis of equipment failures and other reliability problems for engineering and maintenance personnel.

At period's end, District engineers were developing plans for a wide-ranging safety study which would analyze the interaction of trains employees, passengers, operating procedures and other factors to determine the system's full public safety potential relative to operating and design limitations, and relative to other transit systems. The study is estimated to cost \$750,000 with two-thirds funding from the U.S. Urban Mass Transportation Administration.



(Then) U.S. Secretary of Transportation John Volpe (center) was escorted by Passenger Service Representative Karen Sandeen and 1972 District President George Silliman during his October 11 visit to dedicate the system.

"We have tried hard to provide quality surroundings for our patrons, and they seem to truly appreciate this quality."

DESIGN & CONSTRUCTION

The Design and Construction Department (previously called the Engineering and Construction Department) assumed greater responsibility for management of project design and construction to permit the orderly phaseout of the District's engineering consultants (Parsons, Brinckerhoff-Tudor-Bechtel) in this function. Work by PB-T-B engineers on the project decreased approximately 45 percent from the 1971-72 period level. Department personnel directly managed construction for 14 contracts, and prepared 16 smaller improvement and procurement contracts, in addition to monitoring design and/or construction of 226 outside contracts.

Construction: Completion of the Concord and Daly City stations and related trackage, plus Phase I (shell only) of the Embarcadero Station, concluded all line and station construction required for operation of the full 71-mile train system. Phase II (interior construction) of the Embarcadero Station commenced in June, 1973. (Trains will run through the station without stopping until its completion in late 1975.)

Major construction centered around the Outer Market line (for San Francisco Municipal Railway streetcars), which included work on the Van Ness Station and tunnels, the Church Street and Castro Street stations, and associated line work. Design of the West Portal Station was near completion.

Mezzanine extensions to Montgomery and Civic Center stations were completed, with the Powell Street Station extension 94 percent complete. Construction was well underway on the District's cash handling facility and a new warehouse (both near the Oakland Shop).

The period closed with overall project design more than 99 percent complete and construction 82 percent complete. The proximity of these figures to the previous period closing — 99 percent for design and 80 percent for construction — reflects a substantial amount of system improvements introduced into the project (see Special Projects below) for which new contracts are identified and scheduled. Overall value of the project was estimated at \$1.522 billion (including \$269 million in federal grants to date), with \$1.282 billion expended to date.

Contracts: Fifty-two contracts were completed, bringing total project contracts completed to 226 and valued at \$667 million. Work-in-progress was valued at \$325 million. Thirty-eight contracts totalling \$39 million remained to be awarded.

President Richard Nixon says "well done" to employees gathered at the Lake Merritt Station fountain plaza after riding the system on September 27.



PASSENGER SERVICE:

Special Projects: A \$2.5 million over-water platform adjacent to the Ferry Building in San Francisco was completed. Its purpose is to safeguard the tube and west ventilation structure from Port of San Francisco navigation and other potential hazards. Work on a \$2.5 million "concrete blanket" to protect the transbay tube from Port of Oakland navigation was started. Design work was completed on a \$1.5 million walkway between the Coliseum Station and the Oakland Sports Complex. Design was started on a two-mile test track (south of Hayward) for fleet modification and checkout, and on increased power distribution capacities throughout the system.

Most of these and other major construction projects in the period were approved for up to two-thirds federal funding. Grants totalling \$89 million were approved, including a two-thirds grant of \$27 million to increase the fleet from 250 to 350 cars. (An additional four-fifths grant for \$34 million to increase the fleet to 450 cars was pending approval.) Pending approval was 92 percent funding of a multi-level parking structure at the Daly City Station by the Federal Highway Administration, with eight percent funding by Daly City.

Status of systemwide contracts:

Trackwork - BART	100%
MUNI	45%
Electrification - BART	100%
MUNI	0
Train Control and Communications	73%

Status of civil structure contracts:

A Line (Fremont)	100%
C Line (Oakland Subway - Concord)	100%
R Line (Richmond)	100%
B Line (Transbay Tube)	100%
S Line (SF BART/Muni Subway)	92%
S Line (Outer Market Muni)	45%
M Line (Mission St. - Daly City)	99%

A major effort in public contact training and preparation of advertising, publicity, and passenger information materials preceded the September 11 start-up of revenue service. The Passenger Service Department instructed train operators, station agents, and other transportation personnel in courteous handling of patrons. Operators in the Telephone Information Center received similar sensitivity training, in addition to thorough orientation on train and feeder bus service. BART information operators were handling 1,000 calls daily in English, Chinese and Spanish. "All About BART" brochures, in the same languages, plus Braille, were located in handy station racks. Another brochure informed patrons about station elevators, special parking, and other system facilities for the handicapped.

Extensive station graphics were prepared to encourage maximum self-reliance among patrons in using the system. Large maps in each station depict train routes, local streets and bus routes, and points of interest along the system. These key graphics won awards for excellence in art design.

BART's advertising program in daily newspapers was coordinated with system graphics and literature to educate the public in using the system as well as promote the service. The \$200,000 budget was spent primarily on newspaper space and remains the same for the next fiscal year. After the full system is operating, advertising will be directed at promoting off-peak ridership.

A Passenger Service Corps, organized among 40 trained volunteers from various District offices, provided valuable assistance in handling crowds at line openings and special events.

A Passenger Relations Committee was formed to identify and coordinate solutions among all necessary departments for passenger-related problems and complaints. The committee sought improvements in such aspects of passenger service as train and station announcements, station signs, and automobile and bicycle parking accommodations.

The train destination signs, working smoothly after a short break-in period, were fulfilling their promise as a valuable communication medium. Informative messages from all appropriate system departments are channeled onto the signs by Passenger Service. News bulletins and advertising messages have been improved to fit the sign format. Advertising revenue of \$510,000 for the period is used to amortize the cost of the computerized, systemwide signs.

Conscientious follow-up and a written response to all complaints and suggestions received from patrons is considered a key Passenger Service activity.

A signage improvement program, underway at period's end for 26 stations, is based on patron comments and station agent observations during the opening months of revenue service on each line.

"The pride and involvement of BART communities in the opening of their stations was a rewarding experience for all BART people."

(Left) "A glorious day," agreed San Francisco Mayor Joseph Alioto, (then) District Vice-President Chester, and Oakland Vice Mayor John Ogawa when they officially opened Lake Merritt Station for revenue service on September 11, 1972. (Below) Mrs. Gertrude Guild of Oakland made her imprint on BART history at Lake Merritt as the system's first revenue passenger.



(Left) Richmond Station was the focal point of ceremonies opening the Richmond Line on January 29. (Above) Pleasant Hill Station was typical of the colorful community ceremonies opening the Concord Line on May 21. Director Joe Silva and "Miss Pleasant Hill" (Nancy Davis) wait for Mayor Ben Hartinger to cut the traditional ribbon.

"Patronage is generally bearing out our marketing forecasts, and indicates solid public acceptance of BART."

PLANNING & RESEARCH

The Research Department provided considerable support to development of the 1973-74 operating budget and the five-year forecast of capital and operating fund requirements. The Planning Department carried on District liaison for a wide range of projects with the Bay Area Metropolitan Transportation Commission (MTC), and other local agencies and transit systems. In addition, both departments carried on their own planning or research projects during the period, which are summarized below.

Feeder Service: An Agreement with the Alameda-Contra Costa Transit District enabled patrons to transfer from BART to buses at no charge when revenue service commenced. Free transfer machines were installed at all East Bay stations served by AC Transit, which altered 87 bus routes for feeder service. The revenue loss for the free one-way bus ride for BART patrons is shared equally by BART and AC Transit. A tentative agreement was also reached with the San Francisco Municipal Railway for feeder service routing to BART stations, plus some type of transfer arrangement to be further defined.

The staff will continue working to improve AC-MUNI-BART transfer procedures and feeder service in the coming period. Work also began with other agencies to establish local and BART feeder bus service in central Contra Costa County, Berkeley, and the Fremont-Newark-Union City area.

Pending approval was a federal grant application for two-thirds funding of four express bus lines into Contra Costa and Alameda county communities not yet served by BART trains. The \$2.5 million project is to be one-third funded by local sales tax revenues. To complement the train system's extensive facilities for the handicapped, BART's 32 buses will be the first in general service to accommodate wheelchair patrons.

Marketing: Management is firmly committed to a broad concept of marketing which makes service geared to consumer satisfaction a shared objective of all departments in the District. Completion of a well-disciplined marketing plan (1) established the consumer market framework within which BART operates; and (2) developed strategies for achieving measurable ridership objectives. Speed, convenience, reliability, and good employee-patron contact are identified as the important points to sell on BART service — with good feeder service to BART necessary in the eyes of the consumers.

To develop the baseline data needed for marketing decisions, monthly reports were begun on patronage, fares, parking lot use, and train operations. Also begun were the first of a series of studies on public attitudes, and awareness, passenger travel patterns, ages, occupations, and other pertinent social data. Vital marketing re-



(Left) Technicians Mark Schroeder, Victor Eng and Bob Draper (standing) monitor elaborate network of communications from BART "nerve center" at Lake Merritt. (Below) A two-car train glides silently down grade toward the Orinda Station, illustrating extensive testing that preceded opening of each line.



REAL ESTATE

search and active programs will be expanded during the next period with a federal grant obtained for this purpose.

A strong marketing program carried on with major Bay Area banks resulted in 177 bank outlets handling off-site sales of discount and high value tickets by period's end. Red discount tickets of \$10 value were made available for \$2.50 to patrons under 13 and over 65 years of age. Regular blue tickets, of \$10 and \$20 value only, also were made available to reduce waiting lines at station ticket vendors.

Blocks of discount tickets were made available directly from the District for groups of under-13 students. Tickets of 60 cents and \$1 value (sold for 15 cents and 25 cents) facilitate quantity sales to school districts for tours and field trips.

Extensions: A final report on the Oakland Airport transit project cited a separate "connector" system between Coliseum Station and the airport as more compatible to BART train operations than a direct extension. Evaluation of different routes and station locations continued for three proposed extensions to the Livermore-Pleasanton, Pittsburg-Antioch and Northwest San Francisco areas, and for the San Mateo County Transit Development Project with which BART is cooperating. The final report of the San Francisco Airport Access Project was printed; and negotiations were begun between San Mateo County, the City and County of San Francisco, and BART to implement an extension to the San Francisco airport.

Other Studies: A major project was begun to develop research data on regional transit travel patterns. "Real world" behavior affecting travel patterns will be simulated via computer models during the next period to further evaluate route options for the various extensions proposed.

A "BART/TRAILS Study" was prompted by two environmental groups (People for Open Space and San Francisco Planning and Urban Renewal Association) and funded by the U.S. Department of Transportation and the East Bay Regional Park District. Possible relationships between BART and bicyclists for both commuting and recreational purposes will be explored by the staff and a plan for routes issued during the next period.

BART was one of three transit agencies in the country selected for implementation of a federal "Station Area Development" plan. The Lake Merritt and Coliseum stations will be used to demonstrate how BART, other public agencies, and private investors can cooperate to improve transit station environments.

Acquisitions of land or land rights were completed during the period from 57 parcels at a total cost of \$3,260,000. The acquisitions represent the conclusion of property transactions for existing system right of way and facilities, including right of way acquired from The Atchison, Topeka & Santa Fe Railway between Berkeley and Richmond. Transactions involving approximately 150 additional parcels remain to be concluded throughout the system. New requirements from 16 parcels arose during the year for the Coliseum Walkway, Church Street and Castro Street Muni Stations, and other projects.

New federal and state laws have increased the amount of staff work involved with property acquisitions and the related relocation of people and businesses. These new laws have substantially increased the amount of time and manpower necessary to obtain property for District use.

Real estate income from property rentals, leases and sales exceeded \$600,000 during the year. More than \$5 million has been recaptured since 1964 from the District's real property holdings.

Customer service facilities - public telephones, newspaper vending racks, parcel storage lockers, mail boxes, bicycle lockers, and refreshment vending machines - were installed in BART stations prior to revenue service. Newsstands will be opened at downtown Oakland and San Francisco stations when San Francisco service begins.

Right of way estimates being provided for various extension projects under study will continue during the coming year, as will activities concerning property acquisition, condemnation, relocation, street and utility conveyances, special access to stations, customer services, land sales, leases, and property management.

Neighborhood
residents - old and
young alike - enjoy
BART's beautiful
linear park extending
for 2.7 miles through
Albany and El Cerrito
under the aerial
train way.



ADMINISTRATION

An ongoing analysis of cross-related departments and manpower skills resulted in major realignments within operations, maintenance, engineering and training areas during the period. The realignments increased centralization of related activities, particularly in technical support and documentation.

A major activity of the General Services Department was reassigning and acquiring new office space to support increased revenue service and other activities. Offices now located outside the headquarters building will be consolidated in the Oakland Commerce Building, 1540 San Pablo Avenue, near the Oakland City Center - 12th Street Station. Computerized inventory control was expanded from the Hayward Shop storeroom to all other District storerooms. Also established was a lost and found service for passengers, and a systemwide delivery service between BART facilities.

The various data processing programs comprising the Management Information System (activated in 1971) were modified for improved efficiency in all administrative data reporting areas.

Under a federal (UMTA) grant, the department began development of a Maintenance Planning System to optimize preventive maintenance schedules and cost controls. The system will be designed for general application in the transit industry.

The 1973-74 fiscal year Operating Budget was set at \$37.1 million, up \$10.8 million from the 1972-73 period. A revision of this budget is expected, however, as it is necessarily based on very tentative assumptions involving manpower levels, labor costs, other funding requirements, and scheduling of transbay service.

Labor costs will remain tentative until current negotiations of the District's first collective bargaining contracts are completed. The results of a current manpower study being conducted by an outside consultant, Arthur D. Little, Inc., could also effect budget changes.

A major administrative project, involving numerous departments, was development of a five-year financial forecast of requirements for capital and operating funds. Operating expenses and revenues were projected, and other possible sources of funding analyzed, to provide data required for long-range management decisions.

As the result of sharply increasing costs of operation, the project report forecasted major annual deficits ahead which fare increases cannot offset. Thus, the question of how to meet the system's full operating costs loomed in the next period.

Property tax rates fixed by the District decreased for the 1973-74 fiscal year (see table below). They will continue to decline until full redemption of \$792 million in District construction bonds.

Property Tax Rates

	1973-74			1972-73
	Admin. Expenses	Debt Service	Total Rate	Total Rate
Alameda	4.7	48.9	53.6	58.7
Contra Costa	5.0	53.7	58.7	61.4
San Francisco	5.3	55.6	60.9	65.1

NOTE: Tax rate is per \$100 assessed property value. Different tax rates reflect equalization of different assessment formulas among counties.

The General Counsel's Office handled an increasing variety of legal work during the period; but emphasis remained on legal problems and litigation involved in the close-out of major construction and procurement contracts.



A Christmas gift of \$90 in train tickets from Richmond Shop employees enabled elderly and handicapped patients at Fremont's Parkmont Convalescent Hospital to take sightseeing trips on the system. Vehicle Inspector Richard Taylor (left) presents tickets to patient George Migo, 76, and nurse Nancy Davis.

"In our desire to be good professional managers, we cannot forget BART is an important forum for new social issues."

ACCOUNTING & FINANCE

The accounting and auditing workload of the Controllershship Department, which centered around construction and equipment contracts in previous periods, substantially expanded with the start-up of fare revenue service. Areas of expansion included revenues, an 80 percent increase in the payroll, off-site ticket sales, supplies procurement, and inventory build-up. Increased Federal grant disbursements also involved increased accounting work during the period.

Off-site cash sales of high value and discounted tickets amounted to \$213,187. Earned passenger revenues totaled \$2.1 million for the period. Two special encoding machines were on order which will expedite encoding of tickets with appropriate cash values for off-site sales.

Temporary investments of District general construction funds produced interest income of more than \$8 million. District bonds retired were:

General Obligation, \$9.1 million; Special Service District No. 1 (Berkeley), \$250,000; and Sales Tax Revenue Bonds, \$13.6 million.

Fare Collection: Treasury Department personnel set up procedures to collect revenues from fare machine cash boxes with District-owned armored trucks, transport them to a cash-handling facility for counting, and thence to local banks for daily deposits. Counting was carried out at the Lake Merritt headquarters building until activation of the new cash-handling facility near the Oakland Shop. Collection and counting crews were trained in strict procedures to assure maximum cash accountability and security. The procedures assure that no large amounts of cash accumulate in stations or the cash facility.

Opening transbay service to San Francisco will bring daily collections to an estimated six tons of coinage and 200,000 paper bills. Station change machines will use more than five tons of coinage daily. Additional cash-handling crews will be trained for this workload.

Equipment was ordered for a computerized system which will report cash amounts in all station fare equipment to a central computer at District headquarters at hourly intervals. The central computer will compare each day's report of total cash collected and counted at the cash facility. The system will also record entry and exit stations for every trip made on BART, providing a continuous systemwide "trip profile" for marketing and operations. Called the Data Acquisition System, it will be activated during the next period.

Insurance & Safety: Transition was begun from a fully insured (carrier) program to a substantially self-insured program. Significant savings in premiums are expected, and the District may eventually negotiate all District insurance directly. An

outside organization was retained to administer self-insured losses, and the District may eventually assume this function in anticipation of additional savings.

Payments on passenger accident claims amounted to \$5,000, with 74 claims reported. Payments on employee accident claims amounted to \$22,000, with 134 accidents and 22 lost time injuries reported. The District's single fatality occurred when a track foreman was struck by a revenue train while cranking switches near the Hayward Yard.

Safety personnel regularly inspected and reported on all District facilities. Relatively minor corrections in shop and station areas were required in anticipation of the District becoming subject to provisions of the federal Occupational Safety and Health Act.



Auditor Joe Maher runs coinage collected from station fare machines through counting equipment in District cash room. Computers will soon be used to monitor daily cash deposited in fare machines with daily cash room counts.

"Our business is not merely operating trains efficiently, but transporting people quickly, comfortably, and safely."

Passenger Service Representative Carol Hirase answers questions from handicapped youngsters during a tour of the system. The staff has conducted educational tours for thousands of school children since the system opened.



PERSONNEL

Total District personnel increased from 762 to 1,400 during the period, including 515 new hourly employees hired for support of revenue service.

Minority employees increased from 30 percent to 37 percent of the staff during the period, with those in managerial, professional or administrative jobs increasing from 20 percent to 25 percent of the group. Management accomplished its goal of bringing the minority ratio on the staff above that of the three BART counties. More women were promoted to supervisory positions than in any previous period, and the District appointed its first woman manager.

An advisory panel of officials from Oakland, Richmond and San Francisco minority communities was appointed to survey District policies in recruiting, training and promotion as they relate to ethnic minorities, women and the handicapped. The panel conducted public meetings within their respective communities to study attitudes toward BART, and reported their findings to the District Directors. The Personnel Department staff had begun to implement the recommendations by the period's end.

The competitive position of the District's merit review plan within transit and related industries was maintained with the assistance of an outside consultant. Employees were briefed on wage and salary policies and received a detailed analysis of District benefits for their personal records. Health insurance coverage was improved for all employees at no added cost.



One of the busiest stations in the East Bay is the Central Berkeley Station, serving the downtown area and the University of California campus. (Above) Service Supervisor Rocky Green adjusts television receivers used to monitor far corners of the large station. (Below) Treasury Supervisor Charles Gillam reports on cash collections from Station Agent Betty Maddax's central booth.

LABOR RELATIONS

A state arbitrator's decision imposed a hiring freeze on the District from June 18 to July 15, 1972, to identify qualified employees of five other local transit systems who desired to exercise "job preference" rights for BART jobs. The rights were established under provision 13 (c) of the U.S. Urban Mass Transportation Act of 1964. The District processed 1,100 applicants during the freeze, resulting in 150 "13 (c) hires."

In an election held on April 18, maintenance and clerical employees voted for representation by the United Public Employees Local 390. Transportation employees voted for representation by the Amalgamated Transit Union. Supervisory employees voted for no union representation. The election climaxed two years of state hearings to determine which District employees would be directed to vote on representation, and which among 22 interested unions would be on the ballot.

The District was directed by the state to negotiate one "umbrella" contract with the two unions, who represent a total of 1,100 clerical, maintenance and transportation employees. The purpose of the joint contract is to minimize the potential for system strikes and shutdowns. One additional contract remained to be signed with the BART Police Officers Association, an independent affiliation of Police Services Department personnel.

At period's end, a strike threatened to break off District contract negotiations with Local 390 and ATU. Employees in both unions had voted to walk out in protest over wage rates for the 13 (c) employees which were, in some cases, higher than those for non-13 (c) employees. (NOTE: The UMT Act and subsequent arbitration obliged the District to pay 13 (c) hires the same rates received on their prior jobs with other transit lines.)

When contract negotiations are completed in the coming period, Labor Relations personnel will brief management and employees on its provisions to assure fair and uniform interpretation by all parties. The opening of transbay service to San Francisco is expected to focus on another 13 (c) provision, which requires the District to either hire or compensate other transit line employees "adversely affected" by BART service. Lastly, union demands for a totally new 13 (c) agreement might be faced by the District.

Employees were kept informed of important management-labor developments by timely memos from the General Manager and by the employee newspaper.

PUBLIC & COMMUNITY RELATIONS

Extensive effort went into activities designed to foster community interest and pride in BART. During the several summer months preceding the September 11 start-up of revenue service, the staff worked long overtime hours to stage week-end previews for the public at 13 stations on the system. More than 100,000 Bay Area residents inspected the stations and trains on display. The staff was briefed to answer a wide range of questions about the system.

Maximum involvement of public officials, merchants, schools, and citizen organizations was sought in ceremonial openings of the Fremont, Richmond and Concord lines. District personnel arranged separate, colorful ceremonies for each opening station, according to each community's preferences.

System tours conducted for students, professional and foreign groups were at an all-time high during the period, as were speaking engagements filled by staff members to inform groups about BART.

"Third Rail Warning" letters for children and their parents were distributed by the thousands, prior to turning on third-rail power for each line. Cooperation from school districts, which mailed the letters to parents, was excellent. Newspapers cooperated fully in publicizing the warnings, and there were no third-rail accidents during the period.

A team of Public Relations and Police Services personnel was assigned to develop channels of direct contact with juveniles in an effort to reduce vandalism on the system.

Visits by President Richard Nixon on September 27 and (then) Secretary of Transportation John Volpe on October 11, were carried out with minimum interference to revenue service.

Servicing of press, radio and television media reached an all-time high with the opening of the Fremont Line, and continued with subsequent line openings.

A train dispatched onto the mainline March 12 caused a flurry of interest among the news media. In its cab was Margie Johnson, BART's first lady train operator. Other women have since followed as train operators, police officers, and in other challenging jobs.



San Francisco Bay Area Rapid Transit District

Balance Sheet

	June 30	
	1973	1972
Assets		
Cash (including time deposits of \$63,500,000 and \$109,200,000)	\$ 65,452,463	\$ 109,468,936
U.S. Treasury securities (Note A)	10,511,768	12,265,391
Federal Agency securities (Note A)	37,661,655	46,651,410
Miscellaneous receivables	2,457,391	3,352,221
Deposits and notes receivable	23,926,623	24,372,459
Construction in progress (Note I)	562,279,087	1,141,867,278
Facilities, property and equipment (Notes A and C)	718,452,015	3,298,317
Materials and supplies (Note A)	1,152,039	406,411
Debt Service Funds, net assets (including time deposits of \$44,606,500 and U.S. Treasury and Federal Agency securities of \$19,070,445 in 1973 and \$30,149,600 and \$21,585,700 in 1972) (Notes D and E)	65,176,148	52,566,594
	<u>\$1,487,069,189</u>	<u>\$1,394,249,017</u>

Liabilities, Reserve and Capitalization

Construction contracts and others	\$ 41,630,684	\$ 17,218,669
Unearned fare revenue	297,254	-0-
Payable to State of California (Note G)	39,110,538	39,110,538
Debt Service Funds (Notes D and E)	65,176,148	52,566,594
Reserve for self-insurance (Note H)	15,000,000	15,000,000
Capitalization:		
Construction funds:		
General Obligation Bonds (\$812,500,000 authorized) (Note D):		
Bonds outstanding	786,310,000	795,660,000
Bonds matured and retired	17,690,000	8,340,000
	<u>804,000,000</u>	<u>804,000,000</u>
Sales Tax Revenue Bonds (\$150,000,000 authorized) (Note E):		
Bonds outstanding	127,900,000	141,500,000
Bonds matured and retired	22,100,000	8,500,000
	<u>150,000,000</u>	<u>150,000,000</u>
U.S. Government Grants (Note F)	156,157,472	113,909,977
State of California Grant (Note G)	116,543,462	112,756,462
Contributions from others	4,661,226	3,428,022
	<u>1,231,362,160</u>	<u>1,184,094,461</u>
Accumulated revenues	93,391,285	84,391,568
	<u>1,324,753,445</u>	<u>1,268,486,029</u>
General Fund accumulated net revenues	1,101,120	1,867,187
	<u>1,325,854,565</u>	<u>1,270,353,216</u>
	<u>\$1,487,069,189</u>	<u>\$1,394,249,017</u>

Statement of Revenues, Expenses and Accumulated Net Revenues

General Fund	Fiscal Year Ended June 30	
	1973	1972
Revenues:		
Operating revenues:		
Fares	\$ 2,434,466	
Less discounts, tranfers, other deductions	330,845	
	2,103,621	
Other	120,394	
Financial assistance - Transportation Development Act of 1971	1,370,000	
	3,594,015	
Taxes	3,784,184	\$ 3,589,561
Interest and other	166,741	79,650
	7,544,940	3,669,211
Expenses:		
Personal services	16,912,390	9,269,871
Rent and office expense	1,154,657	628,155
Professional and specialized services	928,132	1,183,004
Travel expense	177,091	167,569
Other	3,369,259	1,338,749
	22,541,529	12,587,348
Less charges to construction in progress and other	14,230,522	8,646,258
	8,311,007	3,941,090
Excess of expenses over revenues	(766,067)	(271,879)
Accumulated net revenues at beginning of year	1,867,187	2,139,066
Accumulated net revenues at end of year	<u>\$ 1,101,120</u>	<u>\$ 1,867,187</u>

Debt Service Funds

	Fiscal Year Ended June 30, 1973			Fiscal Year Ended June 30, 1972
	General Obligation Bonds	Sales Tax Revenue Bonds	Combined	Combined
Revenues:				
Property taxes	\$44,153,452		\$44,153,452	\$43,931,781
Transaction and use taxes received	-0-	\$31,054,621	31,054,621	27,769,713
Interest	1,240,617	2,021,859	3,262,476	2,333,134
	45,394,069	33,076,480	78,470,549	74,034,628
Less:				
Matured interest	34,897,171	8,001,800	42,898,971	43,642,974
Matured principal	9,350,000	13,600,000	22,950,000	16,390,000
Bond service expense	-0-	12,024	12,024	29,986
	44,247,171	21,613,824	65,860,995	60,062,960
	1,146,898	11,462,636	12,609,534	13,971,668
Balance at beginning of year	17,764,789	34,801,805	52,566,594	38,594,926
Balance at end of year	<u>\$18,911,687</u>	<u>\$46,264,461</u>	<u>\$65,176,148</u>	<u>\$52,566,594</u>

See notes to financial statements.

San Francisco Bay Area Rapid Transit District

Statement of Changes In Construction Funds

	Fiscal Year Ended June 30	
	1973	1972
Total construction funds at beginning of year	\$1,268,486,029	\$1,223,454,181
Addition during the year:		
U.S. Government grants received	42,247,495	27,750,622
State of California grants received	3,787,000	4,614,300
Contributions from others (adjustment)	1,233,204	(101,736)
Accumulated revenues (primarily interest)	8,999,717	12,768,662
	56,267,416	45,031,848
Total construction funds at end of year	<u>\$1,324,753,445</u>	<u>\$1,268,486,029</u>

Statement of Changes In Financial Position

	Fiscal Year Ended June 30	
	1973	1972
Financial Resources Were Used For:		
Excess of expenses over revenues	\$ 766,067	\$ 271,879
Additions to construction in progress and facilities, property and equipment	135,565,507	106,549,919
Bond interest	42,898,971	43,642,974
Bond principal	22,950,000	16,390,000
Increase in Debt Service Funds	12,609,554	13,971,668
Other	757,652	436,397
	<u>\$215,547,751</u>	<u>\$181,262,837</u>
Financial Resources Were Provided By:		
Property taxes	\$ 44,153,452	\$43,931,781
Transactions and use taxes	31,054,621	27,769,713
Grants from U.S. Government	42,247,495	27,750,622
Grants from State of California	3,787,000	4,614,300
Contributions from others (adjustment)	1,233,204	(101,736)
Interest on investments	12,262,193	15,101,796
Decrease (increase) in miscellaneous receivables and deposits and notes receivable	1,340,666	(20,322,691)
Increase (decrease) in construction contracts and other liabilities	24,709,269	(6,658,863)
Decrease in cash and securities	54,759,851	89,177,915
	<u>\$215,547,751</u>	<u>\$181,262,837</u>

See notes to financial statements.

Notes to Financial Statements

Year ended June 30, 1973

NOTE A - Summary of Significant Accounting Policies

The San Francisco Bay Area Rapid Transit District is a political subdivision of the State of California created by the Legislature in 1957 and regulated by the San Francisco Bay Area Rapid Transit District Act, as amended. The District does not have stockholders or equity holders and is not subject to income tax. The disbursement of all funds received by the District is controlled by statutes and by provisions of various grant contracts entered into with the State of California and the United States Government.

The General Fund receives an allocation of property tax revenues for purposes of providing for administrative expenses not involving construction in progress.

Securities are carried at cost which approximates market.

The cost of acquisition and construction of rapid transit facilities is recorded in construction in progress and represents amounts paid or owing to contractors including amounts provided by State and Federal grants for construction purposes. As facilities are completed and become operative, the District transfers them to facilities, property and equipment accounts.

During the continuing construction phase, the District has not provided depreciation on facilities, property and equipment.

Certain pre-full revenue operating expenses of the District, net of fare revenues, will be charged to construction in progress until such time as full revenue operations are attained, which is expected to be in 1974.

Materials and supplies are stated at average cost.

Accounting policies for general obligation bonds (Note D), sales tax revenue bonds (Note E), government grants (Notes F and G), reserve for self-insurance (Note H) and construction in progress (Note I) are described in separate footnotes.

NOTE B - Significant Events

In September of 1972, initial operation of the system was commenced on the Fremont-MacArthur line. The Richmond line was opened in January of 1973 followed by the opening of the Concord line in May of 1973. These three segments, all on the east side of San Francisco Bay, represent approximately 56 miles of the basic t-rail system.

The District's rapid transit operations were shut down by a strike beginning July 1, 1973. Tentative agreements were concluded with the striking unions and revenue operations were resumed on August 6, 1973.

NOTE C - Facilities, Property and Equipment

Facilities, property and equipment are summarized as follows:

June 30, 1973

Land	\$ 84,024,587
Improvements	419,299,633
System operation and control	51,526,259
Revenue equipment	57,407,429
Service equipment	5,564,549
General and administrative	98,064,824
Repairable property items	2,564,734
	<u>\$718,452,015</u>

NOTE D - General Obligation Bonds

In 1962, voters of the member counties of the District authorized a bonded indebtedness totaling \$792,000,000 of General Obligation Bonds. Bonds amounting to \$775,250,000 were outstanding at June 30, 1973, with principal maturities from 1974 to 1999. Payment of both principal and interest is provided by the levy of District-wide property taxes. During 1966, City of Berkeley voters formed Special Service District No. 1 and authorized the issuance of \$20,500,000 of General Obligation Bonds for construction of subway extensions within that city. Special Service District No. 1 Bonds amounting to \$11,060,000 were outstanding at June 30, 1973, with principal maturities from 1974 to 1998. Payment of both principal and interest is provided by taxes levied upon property within the Special Service District.

Bond principal is payable annually on June 15 and interest is payable semiannually on June 15 and December 15 from Debt Service Funds. Principal amounts of \$10,600,000 of General Obligation Bonds and \$260,000 of Special Service District No. 1 Bonds mature on June 15, 1974. Annual maturities in succeeding years are in greater amounts. Interest of \$16,934,640 on General Obligation Bonds and \$252,433 on Special Service District No. 1 Bonds is payable on December 15, 1973. The composite interest rate on bonds currently outstanding is 4.14%.

NOTE E - Sales Tax Revenue Bonds

The 1969 Legislature of the State of California authorized the District to issue revenue bonds totaling \$150,000,000. Bonds amounting to \$127,900,000 were outstanding at June 30, 1973, with principal maturities from 1974 to 1981. The Sales Tax Revenue Bonds are secured by a pledge of the proceeds of the Transactions and Use Tax authorized by the 1969 Legislature and of moneys received by the District from other sources, in lieu of Transactions and Use Tax proceeds, if legally made available. The bonds maturing on or after January 1, 1976, are redeemable prior to maturity at the option of the District on various dates at prices ranging from 104% to 100%. The collection and administration of the tax, which became effective April 1, 1970, is performed exclusively by the State Board of Equalization and all taxes are transmitted directly to the appointed trustee for the purpose of paying bond interest semiannually on July 1 and January 1 and principal annually on January 1. Principal of \$14,450,000 matures on January 1, 1974 (with greater annual amounts thereafter) and interest of \$3,560,900 is payable on July 1, 1973 and on January 1, 1974. The composite interest rate on bonds currently outstanding is 5.55%.

The State Board of Equalization has estimated that the revenue from the Transactions and Use Tax for the period April 1 to June 30, 1973 will be approximately \$7,450,000, of which the trustee had received \$1,675,000 at June 30, 1973.

NOTE F - U.S. Government Grants

The U.S. Government, under grant contracts with the District, provides financial assistance for research, beautification, certain construction projects and transit vehicle procurement. Additionally, the District is administering federal grants to the City and

San Francisco Bay Area Rapid Transit District

Notes to Financial Statements

(continued)

County of San Francisco (CA-03-0004) for construction of three Market Street Station mezzanines, two street plazas and street extensions, and a grant to the City of Berkeley (CA-03-0009) in connection with the construction of subway extensions within Berkeley. The following grants were in force as of June 30, 1973:

Project — Purpose	Maximum Grant	Funds Received
Beautification Grants:		
CALIF-BD-1	\$ 447,953	\$ 360,000
CALIF-B-160	323,000	239,000
CALIF-B-163	521,000	367,000
OS-CA-09-39-1074	838,565	-0-
	<u>2,130,518</u>	<u>966,000</u>
Demonstration Grants:		
CAL-MTD-2 (Transit Design)	6,157,256	6,157,256*
CA-06-0023 (Fare Collection)	1,133,333	947,756
CAL-MTD-7 (Transit Hardware)	761,568	761,568*
CA-06-0032 (Prototype Vehicles)	<u>5,000,000</u>	<u>4,500,000</u>
	13,052,157	12,366,580
Capital Grants — Construction:		
CA-03-0006	12,867,862	12,867,862*
CAL-UTG-11	13,103,910	13,103,910*
CA-03-0015	25,939,945	25,939,945*
CA-03-0019	88,000,000	62,182,575
CA-03-0047	1,000,000	38,000
CA-03-0052	38,136,666	8,938,000
CA-03-0058	1,700,000	-0-
CA-03-0059	27,198,666	500,000
CA-03-0069	<u>21,681,333</u>	<u>-0-</u>
	229,628,382	123,570,292
CA-03-0004 (San Francisco)	19,902,430	14,521,600
CA-03-0009 (Berkeley)	<u>4,733,000</u>	<u>4,733,000*</u>
	<u>254,263,812</u>	<u>142,824,892</u>
	<u>\$269,446,487</u>	<u>\$156,157,472</u>

* Project Completed.

NOTE G - State of California Grant

Pursuant to Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. Under Section 30778 of the Code, further modified by an agreement with the State Department of Public Works, the District will reimburse the State for costs of the tube approaches. At June 30, 1973, the District had received \$172,154,000 of which \$57,610,538 is repayable to the State of California for the tube approaches. Reimbursement will be fulfilled by application of a \$10,500,000 credit to the District arising from highway betterments constructed with District funds on State Route No. 24 and the payment of \$1,000,000 on December 31, 1977, and \$2,500,000 annually beginning December 31, 1978.

NOTE H - Reserve for Self-Insurance

By resolution of the Board of Directors of the District, the reserve for self-insurance is presently limited to a maximum of \$15 million to provide for uninsured general liability and property damage and workmen's compensation exposure at June 30, 1973.

NOTE I - Construction in Progress

During the year, construction in progress decreased as follows:

Balance at July 1, 1972	\$1,141,867.27
Construction	\$118,829,635
Real estate acquired	3,263,925
Utility relocation	1,049,744
Pre-full revenue operating expenses	13,482,330
Other	<u>584,882</u>
	137,210,516
Less:	
Rental income and proceeds from sales of real estate ..	463,717
Insurance premiums refunded	35,823
Transfers to facilities, property and equipment ..	715,151,524
Transfers to materials and supplies	732,730
Other transfers	<u>414,913</u>
	716,798,707
Balance at June 30, 1973	<u>\$ 562,279,08*</u>

An estimate of project costs, based upon information available at July 1, 1973, was developed to determine the estimated cost of the rapid transit system at completion. This estimate amounts to \$1,522,000,000 (including \$180,000,000 for the transbay tube being financed by the State of California and \$118,000,000 for transit vehicles being financed by Federal grant funds and other District sources). Presently, the final cost of the system cannot be determined, as future economic conditions, resolution of pending contractors' claims and delay in start of full revenue operations may have a significant effect on the final cost of the system. Initial operation of the system began in September 1972, and it is expected that the system will be in full operation in 1974.

**Report of
Independent Accountants**

Board of Directors
San Francisco Bay Area Rapid Transit District
Oakland, California

We have examined the balance sheet of the San Francisco Bay Area Rapid Transit District as of June 30, 1973 and 1972, and the related statements of revenues, expenses and accumulated net revenues, changes in construction funds and changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1973 and 1972, and the results of its operations and the changes in its construction funds and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Lauder Ross & Co.

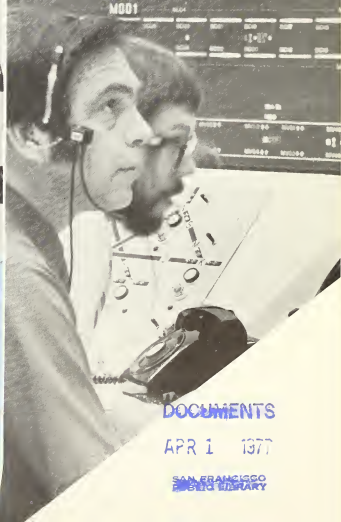
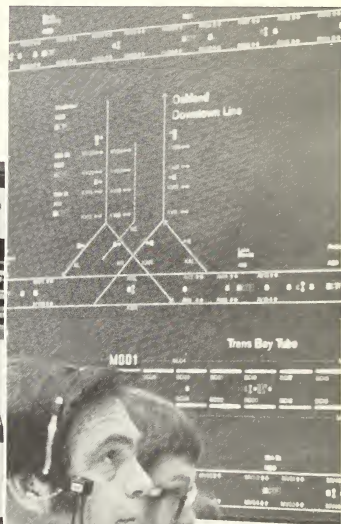
Certified Public Accountants

San Francisco
October 16, 1973



San Francisco Bay Area Rapid Transit District

This Annual Report for the period July 1, 1972 to June 30, 1973 is published by the District pursuant to Article 28770 of the State of California Public Utilities Code. District Headquarters are located at 800 Madison Street, Oakland, California 94607. Telephone 415-465-4100.



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CITY & COUNTY OF SAN FRANCISCO

WILLIAM H. CHESTER
THOMAS F. HAYES
QUENTIN L. KOPP
WILLIAM M. REEDY



*Director H. R. Lange died. Director Ralph H. Neal by appointment of the City Selection Committee of Contra Costa County February 13, 1974. Director Neal resigned January 18, 1975 after succeeding Director James P. Doherty by appointment of the City Selection Committee September 30, 1973.

**Director Nello Bianco died. Late Director Joseph S. Silva by appointment of the Contra Costa County Board of Supervisors October 22, 1973.

Officers

B. R. STOKES
General Manager
L. D. DAHMS
Assistant General Manager-Operations
L. A. KIMBALL
Assistant General Manager-Administration
M. BARRETT
General Counsel
W. F. GOELZ
Director of Finance
R. J. SHEPARD
Secretary

DEPARTMENT HEADS

C. K. BERNARD
Marketing & Research
M. K. BOWERS
Employee Relations
M. A. DENOWITZ
Quality Control
J. B. FENDEL
Construction
W. F. HEIN
Planning
E. GREGERMAN
Maintenance
R. M. LINDSEY
Police Services
W. J. RHINE
Engineering
A. E. WOLF
Transportation

San Francisco Bay Area Rapid Transit District: Established by the State of California in 1957. Authorized to finance, construct, and operate a new high-speed rail rapid transit system under the direction of a representative Board of Directors from the counties of Alameda, Contra Costa, and San Francisco.

President's Message



Challenge and change would best describe the tenor of the 1973/74 fiscal year for BART, and I take pride in milestones reached during that period which will have a marked effect upon the District for decades to come.

The 1973/74 report period, which saw a more than 200 percent increase in patronage, and service extended into San Francisco, reflects credit on the BART people who carried out the responsibilities of revenue service. This same period presented complex problems in operations, engineering, fleet maintenance, finance, administration, and contractor performance, imposing extraordinary demands on both the staff and the District Board of Directors.

Despite serious differences of opinion as to the cause and resolution of these problems, the Board was able to close ranks on major accomplishments during the fiscal year.

At the beginning of the period, the Directors were active in negotiations which resolved a month-long strike of 1,100 District employees and led to initial three-year contracts with our collective bargaining units.

Highest priority during the year was given to extensive engineering work during the period. A tight schedule must be met if we are to achieve the target date of September 16, 1974, for start-up of transbay service. In this effort, which is moving forward on schedule, the valuable contributions of the University of California's Lawrence Berkeley Laboratory should be acknowledged.

Decisive action by the Board in obtaining a temporary extension of BART half-cent sales tax revenues from the California Legislature as an operating subsidy narrowly averted a shut-down of the entire system. Although the sales tax is not favored by many, it was the only avenue permitted us during our period of utmost need. BART's

financial crisis reflected a hard economic fact of life facing all U.S. mass transit systems: some form of federal or state subsidy is essential to keep fares at a reasonable level for the people they were built to serve.

After prolonged deliberations, the Board acted to retain special trial counsel and prepare for litigation against the District's project engineering and contract management consultants and its suppliers of transit cars and automatic train control equipment. This suit was filed after the close of the report period.

The Board's adoption of routes and station locations for future BART extensions to the Pittsburg-Antioch and Livermore-Pleasanton areas was particularly gratifying to me. I would hope that these and other planned extensions within the District continue to receive priority attention until we can make them a reality. Also significant was the awarding of a construction contract for a two-mile test track at Hayward, which will expedite testing and modification work on the fleet.

The 1973/74 report period concluded on the day the Governor of California signed into law the legislation providing for the popular election of a nine-man Board. Thus, the current Board members are the last of a distinguished line appointed to office since 1957 by mayors and county supervisors.

I want particularly to salute my fellow appointed directors, whose term of office will end with the seating of the elective Board. They are men of distinction who did their duty as they saw it. I know the elected Directors, whoever they may be, will do the same. I wish them well.

Nello J. Bianco
Nello J. Bianco
President

The Cover: Engineering blueprints combine with views of the BART system—maintenance shop, operator's cab, Train Control Center—to depict a year of problems and progress amid the new U.S. era of rapid transit technology cradled in the Bay Area.



Management Overview

The fiscal year opened with a system-wide strike involving 1,100 employees of the United Public Employees Local 390 (clerical, maintenance personnel) and the Amalgamated Transit Union Local 1555 (transportation personnel). The July 1-31 strike developed around the issue of wage parity among employees of similar classifications.

(Note: The 13(c) provision of the U.S. Urban Mass Transportation Act of 1964, obliged the District to pay employees hired under the provision the same rates received on their prior jobs with other transit lines. In some cases, these rates exceeded the regular District rates paid other employees.)

The strike ended with the negotiation of three-year contracts, seen as a stabilizing factor for the District. However, labor costs were projected to increase \$19.6 million over the life of the contracts, primarily because they provided for first-year wage increases of 9½-12% and second-year increases of 6-12%, plus cost-of-living increments and expanded fringe benefits.

Staffing The total District staff increased during the period from 1,400 to 1,696, reflecting the build-up of the transportation and maintenance workforce to support expanding local service in San Francisco and large-scale preparations for transbay service. Consequently, training programs for transportation and technical personnel were expanded.

Despite the net gain in the general workforce, considerable streamlining was accomplished at upper management levels, with department heads cut back from a peak of 19 to 10 by the period's end. With the help of outside consultant Arthur D. Little, Inc., an overall manning target of 2,119 was set, but with an actual 2,084 budgeted for the 1974-75 fiscal year.

1. Affirmative Action Officer Charlene Daigre conducts seminars on management objectives for minority employees. 2. Blind employee Harry Cordellos uses optical scanning device to "read" service data in Telephone Information Center.

Finances Of major importance was the ongoing development and refinement of capital and operating fund requirements as projected through the five-year period—fiscal 1973-74 to 1977-78. First presented to the District Board in April 1973 (in the context of the 73-74 budget), the five-year projection was revised in September 1973 to reflect such factors as the July 31 labor contract settlement, the upcoming local San Francisco service, and decreased revenue resulting from the delay of transbay service from September 1973 into 1974.

In January the Board, by formal resolution, advised the State Legislature and Governor, the Metropolitan Transportation Commission, and the U.S. Department of Transportation "of its findings and urgent needs relative to operating financial assistance." The Board asked for "early action...to permit BART to operate and improve its service at moderate fares."

In February the five-year financial report was further revised in light of new revenue and labor cost projections, as well as the costly impact of high, unscheduled maintenance on the car fleet and continuing inflation. The revised report signaled large annual unfunded operating deficits from a total of \$13 million in fiscal 1974-75 to \$28 million in fiscal 1977-78 (approximately 40 percent of that period's projected operating budget).

Meanwhile, the District was taking all possible measures to communicate the increasing seriousness of BART's financial problems to federal, state, and local officials. Detailed testimony was delivered before the State Assembly Committee on Transportation in October, and before the State Senate Public Utilities and Corporations Committee in February and April. Two major points were emphasized: (1) a tax subsidy was the only alternative to meet the widening cost-revenue gap without unacceptably high fares and lowered service levels; and (2) BART's rising deficits were similar to what the whole transit industry was experiencing.

In May the Director of Finance estimated the District would face an unfunded deficit condition by late November 1974. He warned the system might have to shut down in August or September to conserve remaining funds or caretaker expenses.

General Manager B. R. Stokes and other officials called for a temporary extension of the ½-cent sales tax levied since 1970 in District counties to complete construction of the system, and expected to expire in 1975). The tax extension was seen as a temporary means of meeting the approaching unfunded condition until other possible sources of an operating subsidy could be studied by the State Legislature. On

April 2, Senator James Mills (D, San Diego) introduced a bill (SB1966) into the Senate which would extend the sales tax for two years and authorize its use as an operating subsidy. (NOTE: SB1966 was subsequently passed by the Legislature in September 1974.)

Operating Expenses/Revenues Actual operating expenses for fiscal 1973-74 were \$33.9 million, against an operating budget of \$37.4 million. Under-budget spending resulted from a slowdown in hiring and other savings related to deferral of transbay service into the next fiscal year. The budget was set at \$53.8 million for fiscal 1974-75, reflecting increased labor and maintenance costs, as well as expanded service costs. Passenger revenues rose to \$6 million; from \$2.1 million in fiscal 1972-73, with off-site cash sales (of high-value regular, and 75 percent discount, tickets) amounting to \$643,000. Passenger revenues—whose potential is significantly higher than this fiscal period figure—will increase with the advent of transbay service and extended operating hours.

Income from District property rentals, leases and sales was \$270,000. Revenues from system concessions—including newsstands, vending machines, parcel lockers and public telephones—totalled \$27,000. Revenues from display advertising in cars and stations totalled \$157,540. Other revenues were received from Transportation Development Act funds, interest on invested funds, and District tax receipts.

District Property Tax For funding of administrative expenses and debt service on BART construction bonds, rates were set by the Board as follows:

	Admin.	1974-75		1973-74
	Expenses	Debt Service	Total Rate	Total Rate
Alameda	5.0	49.0	54.0	53.6
Contra Costa	4.8	46.4	51.2	58.7
San Francisco	5.2	50.9	56.1	60.9

NOTE: Property tax rates is per \$100 assessed property value. Different tax rates reflect equalization of varying assessment ratios among counties.

Federal capital grants approved for BART included \$34 million to increase the fleet from 350 to 450 cars, and \$1.2 million for construction of a major new entrance to the Oakland City Center-12th Street Station. Local state sales tax receipts of \$6.1 million were allocated for the period to BART for capital improvements and operating expenses under the Transportation Development

Act. The Oakland Redevelopment Agency and the National Endowment for the Arts allocated a total of \$60,000 for artwork in the City Center Station.

Still pending approval were three federal grants: \$2.5 million for a Daly City Station parking structure; \$2.5 million to purchase 32 buses for five BART feeder lines into Contra Costa and Alameda Counties; and \$1.6 million to construct a parking lot for feeder bus patrons in the Dublin area.

Other Significant Areas A 37 percent ethnic minority representation on the staff, as reported for the last period, was maintained. (Note: 37 percent exceeds the minority population ratio within the District by five percent.) Programs for advancing more minority employees into supervisory positions received emphasis, and the Board appointed a full-time Affirmative Action Officer in October. The first of an ongoing series of seminars was held in May to inform key management personnel as to the District's responsibilities and affirmative action policies.

The period saw joint committees of management, union and Safety Office personnel formed to monitor safety practices in all maintenance areas. Employee accident claims totalled \$32,346 with 49 lost time injuries out of 204 accidents reported—a safety record that continued to be considerably better than the industry average.

A substantial dividend from the Workmen's Compensation Insurance carrier, of \$157,899, was received as a continuing benefit from the coordinated insurance program that was in effect during the construction period. Dividends for the system construction project now total \$4,661,995.

Crimes reported on the system by BART Police decreased from 250 per million passenger trips in the previous fiscal year to 149 in this report period. Despite the 60 percent decrease in reported crime relative to patronage, there was a substantial increase in the number of reported offenses. Major categories were petty theft, vandalism, fare evasion, auto burglary and auto theft (from station parking lots) in that order.

On June 30 Assembly Bill 3043, calling for popular election of a nine-man District Board of Directors on November 5, 1974, was signed into law by the Governor. Nine voting districts were established on the basis of equal population, community of interests, and geographical cohesiveness.

Also on June 30 the resignation of General Manager B. R. Stokes became effective. Acting General Manager Lawrence D. Dahms succeeded Mr. Stokes, pending the permanent appointment of a new General Manager by the incoming elected Board.

Operations & Services



The previous fiscal year ended with BART operational in the East Bay Counties of Alameda and Contra Costa. Operations covered 56 miles of the 71-mile system and 24 of the 34 BART stations. Eighteen trains of three and four-car consists, were operating on 10-minute headways, 12 trains on the Richmond-Fremont lines, and six on the Concord-Oakland (MacArthur Station) line. The three train yards and maintenance and repair shops at Hayward, Richmond and Concord were activated.

Three views of the Powell Street Station, beautiful Hallidie Plaza, which quickly became a hub of downtown activity when the San Francisco line opened November 5. At left, connecting Powell Street cable car provides striking contrast in old and new transportation within this city of contrasts.

OPERATING STATISTICS

August 6, 1973, through June 30, 1974)	
Total Car Miles (revenue service only)	10,758,626
Total Passenger Trips (patronage) . . .	13,960,680
Passenger Miles (estimated)	166,033,664
Ridership Ratio (for June 1974)	
Peak	58%
Off-Peak	42%
Net Passenger Revenues (less fare discounts & BART subsidy to ACriders)	6,055,969
Average Passenger Fare (with discount fares considered at full value)	47.7 cents
Average Trip Length (based on estimated passenger miles versus revenue)	11.9 miles



Revenue trains were operating in the automatic mode, with fail-safe separation electronically maintained by the automatic train control system. As an extra safety factor, through a manual supervisor-controlled block system, a minimum two-station separation was maintained between all trains by holding them at platforms, if necessary, to maintain the distance.

Revenue service continued on the limited 6 a.m. to 8 p.m. schedule, five days a week. Nevertheless, the average daily patronage of 36,655 for June 1973 was 95 percent of the forecast based on 20-hour, seven-day service. Peak-hour (commuter) patronage was 19,549, or 138 percent of forecast and close to 50 percent of total daily patronage.

The 1973-74 fiscal year began on the first day of a systemwide strike, which shut down virtually all District operations, except those in managerial, engineering, housekeeping, and security areas. The employees returned to work on August 1, and revenue service was resumed on August 6.

Patronage The five-week interruption in service saw August commuter patronage off 22 percent from the June level and total patronage off eight percent. The first quarter ended with a daily average ridership of 32,762, or 95 percent of forecast. (Note: forecast revised as of August to reflect limited service hours.)

Start-up of service on November 5 between Daly City and Montgomery Street Station in downtown San Francisco added eight system miles, eight stations and four trains to BART opera-

tions. Although the 7.5-mile transbay line remained closed for revenue service, empty trains from the Richmond Yard moved through the tube daily to support West Bay service.

Second quarter ridership averaged 56,240 daily, but November and December averages reflect the immediate impact of West Bay service with 68,013 and 69,796 respectively, and very close to forecast. Peak-hour patronage ranged from 15 to 26 percent over forecast for these months.

The San Francisco line was shut down March 11 to 15 due to picketing of striking municipal city workers. Despite this, the third fiscal quarter was up 28 percent over the previous quarter with 71,794 average daily patronage. A severe gasoline shortage, plus burgeoning West Bay service, were factors in this increase.

The fourth quarter ended with 68,802 daily trips, down 4.2 percent from the previous quarter and 95 percent of forecast. Total year's patronage was 13,960,680, or 98 percent of total system forecast, and 120 percent of peak-hour forecast.

Peak-hour ridership (6-8 a.m. and 4-6 p.m.) rose from 53 percent of total ridership in the previous fiscal year to 58 percent. Average passenger fare decreased from 53 cents to 47.7 cents, and average trip length from 12 miles to 11.9 miles, reflecting West Bay ridership.

Actual daily round trips averaged by trains during the fiscal year were within eight percent of the system's optimum performance target. Non-scheduled train removals increased from a first quarter average of 8.4 per day (out of 18 trains operating before West Bay service) to a four-quarter average of 10.4 trains per day (out of 22 trains operating). Train consists increased from three-four-and-five-cars to seven-car maximums on the San Francisco line and six-car maximums on the Concord line.

The highest one-day patronage was 110,104 on the day after Thanksgiving. Other holidays, including a second year of World Series and playoff games at the Oakland Coliseum, resulted in an excellent record of large crowd control on the system by transportation personnel.

System Safety The period passed with no accidents in mainline train operation. A total of \$15,283 was paid in passenger accident claims, 41 occurring on trains and 101 occurring in stations. Among system safety improvements

during the period were installation of non-skid stripping on station stairways and start-up of a program to equip all BART cars with overhead handrails by the end of the 1976/77 fiscal year.

One major accident occurred when, on January 30, the brakes failed on a heavily-loaded up escalator, causing it to slide backward and injure several passengers. All escalators on the system were immediately rechecked for braking factors under maximum load conditions.

Passenger Services A task force was established to identify and eliminate special problems encountered by elderly, blind, and other handicapped patrons in using the system. Other programs were developed to meet special needs of other patron groups, such as shoppers, tourists, and school children. An experimental program was developed with a limited number of bicycle enthusiasts to determine the feasibility of allowing bicycles on transit cars during off-peak hours. This program will be implemented during the next fiscal year.

Ongoing improvements were made in system facilities for patrons. Sign improvement work continued in stations and parking lots, certain platform courtesy telephones were relocated, newsstands were opened in the large downtown San Francisco and Oakland stations, and bicycle rack and locker facilities were improved at various stations.

Additional fare gates were installed at the Daly City station; and 22 stations are scheduled to receive additional fare equipment during the next period.

Patron use of station parking lots increased from 44 to 62 percent on a systemwide basis, with lots at Daly City, Fremont, and at several Concord line stations filled to capacity-plus. Preliminary approval was obtained for a multi-level parking structure at Daly City (92 percent financed by the Federal Highway Administration, eight percent by Daly City), and design work was started.

Encouraged by the temporary gasoline shortage in early 1974, a number of BART-bus shuttle services were started around the system, including the University of California's sizable "Humphrey Go-BART" operation. A considerable amount of staff work—aimed at expanding parking lots and improving feeder bus service on the Fremont and Concord lines—was carried on with other agencies and on-line communities.



System Support



The period saw exceptionally heavy workloads in the engineering and maintenance areas—often on a seven-day, around-the-clock basis—involving the full spectrum of technical support within the staff and its large consortium of contractors.

The target date for commencing revenue service through the transbay tube and on the San Francisco-Daly City line was directly linked to implementation of recommendations contained in a report, issued February 5, 1973, by the State Senate Public Utilities and Corporations Committee. As developed by the

1. Track inspection is nightly routine for Foreman Ben Delgado. 2. Train control hardware is closely analyzed by Engineers (l. to r.) Frank Harshbarger, Jim Marlais, Bob Townley, and Ron Percey. 3 & 4. Technicians Charles Wolosz and Minna Green test car circuitry in the Hayward Shop.



Committee's special three-man panel of electronic experts, 21 recommendations were aimed at increasing system safety and operating reliability for the start-up of transbay service. When the report period opened, this implementation work was well underway and being monitored by a special BART task force. The work centered around improvements to vehicle braking and propulsion systems, cab controls, and door operation, plus train detection capability of the automatic train control system (ATC).

Preparing for Transbay Installation of wheel "scrubbers" or cleaners to fleet vehicles (to improve wheel-to-track contact) did not produce the hoped-for improvement in train detection reliability. Thus, the District had to set back its target for transbay service from September 1973 to the spring of 1974 (and subsequently to September 1974). At the request of San Francisco officials, however, work continued for 1973 opening of the San Francisco line without transbay service. Checkout and testing of the line was completed by mid-October, and the line opened smoothly on its November 5 target date.

Meanwhile, the decision was made to install an additional means of assuring safe train separation as a back-up to the primary ATC train detection system. A "software" (computer logic) system was selected, known as Sequential Occupancy Release (SOR). In December, a \$1.3 million change order was issued to the Westinghouse Corporation to begin immediate installation of the back-up system.

To facilitate start-up of transbay service prior to SOR activation, the staff began rapid implementation of an interim method of assuring extra train protection: use of the central train control computer to hold trains at stations, if necessary, in order that extra-generous separation distances be maintained between all trains at all times. Two-station train separation had been maintained, per CPUC requirement, since initial start of revenue service by means of station-to-station telephone communication.

By May 1974, computerized control of two-station separation was approved by the CPUC and used systemwide. By late June, a shorter one-station separation (necessary for efficient transbay operation) was approved for the Richmond-Fremont line. (The following month would see one-station train separation activated systemwide,

and CPUC approval for September start-up of transbay service on that basis.)

Assisting BART's technical staff in the transbay effort was the University of California's Lawrence Berkeley Laboratory.

Other Technical Work In February, modification work had commenced which would keep mainline switches under ATC system control should trains be operated in the manual mode.

In April, the first prototype installation for the SOR back-up detection system was successfully demonstrated at Oakland West Station, and installation began on the San Francisco line.

A security radio net was activated systemwide for Police Services at a cost of \$350,000; and significant savings were realized through arrangements for joint use of radio antennas with other organizations. Design and test work on third-rail power feed equipment was carried out to prepare for improvements to available traction power and grounding systems in the next fiscal period.

A comprehensive master plan was completed for coordination of local fire and police departments, and other agencies, in event of system fires, earthquakes, or other disasters. Elements of this master plan will be tested during the next period with simulation of disaster situations. Four 12-ton emergency vehicles were acquired to substantially increase the means of transporting fire fighters and equipment to any point on the system via highway or rail.

Maintenance Ongoing work during the period was directed at improvements to stations, right-of-way, and increasing the reliability of wayside train controls and revenue cars. Extensive modification work was accomplished on the train controls and revenue cars. Training programs were expanded to upgrade skills and phase 209 new personnel into a wide array of technical skills.

A major milestone was implementation in January of the Maintenance Planning System, a computer information network to optimize preventive maintenance and cost controls and monitor vehicle component reliability.

Although fleet maintenance continued to load the manpower and space available at the Hayward, Richmond, and Concord shops, progress was made in a number of problem areas with vehicle components. Modification work, plus parts shortages, however, significantly decreased car availability during

the period. A problem with lateral wheel-on-axle movement, which arose in May, also affected car availability until fixes were accomplished during the summer of 1974.

In June 1973, 52 percent of A-cars and 70 percent of B-cars were available for revenue service. In June 1974, average availability was 45 percent for A-cars and 65 percent for B-cars. The fleet totaled 144 A-cars and 147 B-cars at period's end.

Subways received extensive recaulking to eliminate water seepage, and Fremont line track was realigned. Trackage not under regular traffic at cross-overs and terminals was surfaced with stainless steel beading to improve train detection reliability. All third rail was ground for good collector shoe contact on the San Francisco line prior to its opening, as with previous lines. Significant work in the stations included installation of no-slip stripping on stairways.

Construction Status of the entire BART project at period's end was 227 construction contracts completed at a cost of \$714 million. Construction in progress was valued at \$59 million, including eight contracts valued at \$7.2 million awarded during the period. Overall value of the project was estimated at \$1.607 billion.

Status of remaining station construction: Embarcadero 50%; Civic Center (Entrance No. 3) 63%; Church Street (Muni only) 70%; Castro Street (Muni only) 66%. Design of the West Portal Station (Muni only) was 75% complete.

Major construction contracts centered around the Outer-Market line for Muni streetcars, whose trackwork is 75 percent complete. Besides completion of the stations, the major work item remaining was electrification of the Muni subway level (under Market Street) and the Outer Market line.

Special construction projects included the two-mile Hayward Test Track, 30% complete; and the Coliseum Station walkway (to Oakland Coliseum), 80% complete; and completed switch control towers at Daly City and MacArthur. Besides the West Portal Station, major design projects completed or underway included the special 12th Street-Oakland City Center Station entrance, windcreens for all aerial stations, and bus stop shelters for all stations. Design work was also done on the Berkeley Maintenance Facility, additional yard storage tracks, and the Daly City parking lot structure.

FINANCIAL STATEMENTS

Balance Sheet

	June 30	
	1974	1973
Assets		
Cash (including time deposits of \$24,728,000 and \$63,500,000)	\$ 25,963,349	\$ 65,452,463
U.S. Treasury securities (Note A)	14,635,000	10,511,768
Federal Agency securities (Note A)	33,386,182	37,661,655
Miscellaneous receivables	2,252,533	2,457,391
Deposits and notes receivable	15,736,213	23,926,623
Construction in progress (Note I)	59,127,982	562,279,087
Facilities, property, and equipment (Notes A and C)	1,326,153,715	718,452,015
Accumulated depreciation and amortization (Notes A and C)	(22,026,578)	—0—
Materials and supplies (Note A)	1,880,154	1,152,039
Debt service funds, net assets (including time deposits of \$54,482,900 and U.S. Treasury and Federal Agency securities of \$13,290,686 in 1974 and \$44,606,500 and \$19,070,445 in 1973) (Notes D and E)	70,378,183	65,176,148
	<u>\$1,527,486,733</u>	<u>\$1,487,069,189</u>
Liabilities, Reserve and Capitalization		
Construction contracts and others	\$ 45,491,205	\$ 41,630,684
Unearned fare revenue	587,135	297,254
Payable to State of California (Note G)	39,110,538	39,110,538
Debt service funds (Notes D and E)	70,378,183	65,176,148
Reserve for self-insurance (Note H)	6,000,000	15,000,000
	<u>161,567,061</u>	<u>161,214,624</u>
Capitalization:		
General Obligation Bonds (\$812,500,000 authorized) (Note D):		
Bonds outstanding	\$775,450,000	786,310,000
Bonds matured and retired	28,550,000	17,690,000
	<u>804,000,000</u>	<u>804,000,000</u>
Sales Tax Revenue Bonds (\$150,000,000 authorized) (Note E):		
Bonds outstanding	101,350,000	127,900,000
Bonds matured and retired	48,650,000	22,100,000
	<u>150,000,000</u>	<u>150,000,000</u>
U.S. Government Grants (Note F)	197,641,477	156,157,472
State of California Grant (Note G)	116,902,462	116,543,462
Contributions from others	7,140,035	4,661,226
Depreciation and amortization of assets acquired with contributions by others (Note A)	(5,550,698)	—0—
	<u>316,133,276</u>	<u>277,362,160</u>
Accumulated net revenues before depreciation and amortization	112,262,276	94,492,405
Depreciation and amortization of assets acquired with own funds	(16,475,880)	—0—
	<u>95,786,396</u>	<u>94,492,405</u>
	<u>1,365,919,672</u>	<u>1,325,854,565</u>
	<u>\$1,527,486,733</u>	<u>\$1,487,069,189</u>

San Francisco Bay Area Rapid Transit District

Statement of Operations

	Year Ended June 30	
	1974	1973
Revenues:		
Operating revenues:		
Fares	\$ 6,655,808	\$ 2,434,466
Less discounts, transfers, other deductions	<u>599,839</u>	<u>330,845</u>
	6,055,969	2,103,621
Financial assistance—Transportation		
Development Act of 1971	807,000	1,370,000
Other	<u>187,942</u>	<u>120,394</u>
	7,050,911	3,594,015
Taxes	4,051,726	3,784,184
Interest and other	<u>9,010,468</u>	<u>8,844,270</u>
	20,113,105	16,222,469
Expenses:		
Transportation	7,646,011	3,845,883
Maintenance and quality control	15,833,084	11,013,079
Police services	1,910,689	1,303,677
Construction and engineering	2,393,925	1,086,866
General and administrative	<u>6,119,005</u>	<u>5,363,545</u>
	33,902,714	22,613,050
FUNDED EXCESS OF EXPENSES OVER REVENUES	13,789,609	6,390,581
Unfunded costs:		
Depreciation and amortization of all assets	\$22,026,578	
Less depreciation and amortization of assets acquired		
with contributions by others (Note A)	<u>5,550,698</u>	<u>—0—</u>
NET OPERATING LOSS	<u>\$30,265,489</u>	<u>\$ 6,390,581</u>

Statement of Accumulated Net Revenues

Accumulated net revenues at beginning of year	\$94,492,405	\$86,258,755
Less net operating loss	<u>(30,265,489)</u>	<u>(6,390,581)</u>
	64,226,916	79,868,174
Add:		
Start-up costs and construction overhead		
capitalized (Note A)	22,401,581	14,302,043
Reduction in reserve for self-insurance	<u>9,157,899</u>	<u>322,188</u>
Accumulated net revenues at end of year	<u>\$95,786,396</u>	<u>\$94,492,405</u>

See notes to financial statements.

San Francisco Bay Area Rapid Transit District

FINANCIAL STATEMENTS CONTINUED

Statement of Revenues, Expenses, and Fund Balances of Debt Service Funds

	Year Ended June 30, 1974			Year Ended June 30, 1973 Combined
	General Obligation Bonds	Sales Tax Revenue Bonds	Combined	
Revenues:				
Property taxes	\$43,794,213		\$43,794,213	\$44,153,452
Transactions and use taxes received	—0—	\$35,326,319	35,326,319	31,054,621
Interest	1,977,317	3,568,656	5,545,973	3,262,476
	45,771,530	38,894,975	84,666,505	78,470,549
Less:				
Matured interest	34,374,171	7,211,125	41,585,296	42,898,971
Matured or retired principal	10,860,000	26,550,000	37,410,000	22,950,000
Bond service expense	—0—	64,221	64,221	12,024
Bond premium	—0—	404,953	404,953	—0—
	45,234,171	34,230,299	79,464,470	65,860,995
	537,359	4,664,676	5,202,035	12,609,554
Balance at beginning of year	18,911,687	46,264,461	65,176,148	52,566,594
Balance at end of year	\$19,449,046	\$50,929,137	\$70,378,183	\$65,176,148

Statement of Changes in Financial Position

	Year Ended June 30	
	1974	1973
Financial Resources Were Used for:		
Operations:		
Net operating loss	\$ 30,265,489	\$ 6,390,581
Noncash expense—depreciation and amortization	(16,475,880)	—0—
FUNDS USED IN OPERATIONS	13,789,609	6,390,581
Additions to construction in progress and facilities, property and equipment	82,149,014	121,263,464
Bond interest	41,585,296	42,898,971
Bond principal	37,410,000	22,950,000
Increase on debt service funds	5,202,035	12,609,554
Bond premium	404,953	—0—
Other	792,336	757,652
	\$181,333,243	\$206,870,222
Financial Resources Were Provided by:		
Property taxes	\$ 43,794,213	\$ 44,153,452
Grants from U.S. Government	41,484,005	42,247,495
Decrease in cash and securities	39,641,355	54,759,851
Transactions and use taxes	35,326,319	31,054,621
Decrease in miscellaneous receivables and deposits and notes receivable	8,395,268	1,340,666
Interest on investments	5,703,872	3,584,664
Increase in construction contracts and other liabilities	4,150,402	24,709,269
Contributions from others	2,478,809	1,233,204
Grants from State of California	359,000	3,787,000
	\$181,333,243	\$206,870,222

Every dollar goes to financial statements.

NOTE A—Summary of Significant Accounting Policies

The San Francisco Bay Area Rapid Transit District is a political subdivision of the State of California created by the Legislature in 1957 and regulated by the San Francisco Bay Area Rapid Transit District Act, as amended. The District does not have stockholders or equity holders and is not subject to income tax. The disbursement of all funds received by the District is controlled by statutes and by provisions of various grant contracts entered into with the State of California and the United States Government.

The General Fund receives an allocation of property tax revenues for purposes of providing for general and administrative expenses not involving construction in progress.

Securities are carried at cost which approximates market.

The cost of acquisition and construction of rapid transit facilities is recorded in construction in progress and represents amounts paid or owing to contractors including amounts provided by State and Federal grants for construction purposes. As facilities are completed and become operative, the District transfers them to facilities, property and equipment accounts.

Depreciation on facilities, property and equipment is computed using the straight-line method over the estimated useful lives of the assets. The amount of depreciation of assets acquired with the District's own funds is distinguished from the amount of depreciation of assets acquired with contributions by others, and the latter amount is shown on the balance sheet with the related contributions. This format follows the recommendations for public transportation systems in the Industry Audit Guide "Audits of State and Local Governmental Units" prepared by the Committee on Governmental Accounting and Auditing and issued by the AICPA in September 1973.

Materials and supplies are stated at average cost.

Accounting policies for general obligation bonds (Note D), sales tax revenue bonds (Note E), government grants (Notes F and G), reserve for self-insurance (Note H) and construction in progress (Note I) are described in separate footnotes.

Since 1966, the District consistently has capitalized, as part of pre-full revenue operating expenses, certain start-up costs.

The amount so capitalized for the year ended June 30, 1974 is \$15 million. The District intends to continue the capitalization of these costs until the California Public Utilities Commission approves the full train control system scheduled for completion in the second half of the year ended June 30, 1975. Accordingly, it is anticipated that additional start-up costs projected at \$13 million will be capitalized.

Certain reclassifications have been made in 1973 financial statements to conform to the classifications used in 1974.

NOTE B—Significant Events

The District's rapid transit operations were shut down by a month-long strike in July 1973. Three-year agreements were negotiated with the three organizations representing most of the District's employees.

The District resumed operations on August 6, 1973 between Richmond and Fremont and between Concord and the MacArthur transfer station in Oakland. San Francisco local service between Daly City and Montgomery Street began November 5, 1973. Through transbay service between Daly City and Concord and between Daly City and Fremont began September 16, 1974.

After the close of the fiscal year ended June 30, 1974, the State Legislature extended the one-half per cent Transactions and Use Tax until December 31, 1977, or until the District has received \$82.2 million over and above the amount required to pay principal and interest on the outstanding Sales Tax Revenue Bonds, whichever is sooner. The additional revenues are to be used for operational purposes including the liquidation of operating deficits. The District is authorized to issue negotiable bonds secured by such revenues in amounts not to exceed \$16 million in fiscal 1974/75 and \$8 million in fiscal 1975/76.

NOTE C—Facilities, Property and Equipment

Facilities, property and equipment (stated at cost), asset lives, and accumulated depreciation and amortization at June 30, 1974 are summarized below:

	Cost	Lives (Years)	Accumulated Depreciation and Amortization
Land	\$ 103,298,602		Non-depreciable
Improvements	985,929,864	80	\$12,324,123
Systemwide operation and control	79,571,877	20	3,978,594
Revenue transit vehicles	74,035,403	30	2,465,379
Service and miscellaneous equipment	7,255,129	10	725,623
Pre-full revenue operating expenses	72,135,393	30	2,402,109
Repairable property items	3,926,447	30	130,750
	<u>\$1,326,153,715</u>		<u>\$22,026,578</u>

NOTE D—General Obligation Bonds

In 1962 voters of the member counties of the District authorized a bonded indebtedness totaling \$792,000,000 of General Obligation Bonds. Bonds amounting to \$764,650,000 were outstanding at June 30, 1974, with principal maturities from 1975 to 1999. Payment of both principal and interest is provided by the levy of District-wide property taxes. During 1966, City of Berkeley voters formed Special Service District No. 1 and authorized the issuance of \$20,500,000 of General Obligation Bonds for construction of subway extensions within that city. Special Service District No. 1 Bonds amounting to \$10,800,000 were outstanding at June 30, 1974, with principal maturities from 1975 to 1986. Payment of both principal and interest is provided by taxes levied upon property within the Special Service District.

Bond principal is payable annually on June 15 and interest is payable semiannually on June 15 and December 15 from Debt Service Funds. Principal amounts of \$12,200,000 of General Obligation Bonds and \$270,000 of Special Service District No. 1 Bonds mature on June 15, 1975. Annual maturities in succeeding years are in greater amounts. Interest of \$16,637,765 on General Obligation Bonds and \$245,283 on Special Service District No. 1 Bonds is payable on December 15, 1974. The composite interest rate on bonds currently outstanding is 4.13%.

NOTE E—Sales Tax Revenue Bonds

The 1969 Legislature of the State of California authorized the District to issue revenue bonds totaling \$150,000,000. Bonds amounting to \$101,350,000 were outstanding at June 30, 1974 with principal maturities from 1975 to 1981. The Sales Tax Revenue Bonds are secured by a pledge of the proceeds of the Transactions and Use Tax authorized by the 1969 Legislature and from moneys received by the District from other sources, in lieu of Transactions and Use Tax proceeds, if legally made available. The bonds maturing on or after January 1, 1976 are redeemable prior to maturity at the option of the District on various dates at prices ranging from 104% to 100% of the face amount. The collection and administration of the tax, which became effective April 1, 1970, is performed exclusively by the State Board of Equalization and all taxes are transmitted directly to the appointed trustee for the purpose of paying bond interest semi-annually on July 1 and January 1 and principal annually on January 1. Principal of \$15,300,000 matures on January 1, 1975 and interest of \$2,778,718 is payable on July 1, 1974. The composite interest rate on bonds currently outstanding is 5.54%. On July 1, 1974, bonds in the amount of \$8,840,000 were called prior to maturity.

San Francisco Bay Area Rapid Transit District

NOTES TO FINANCIAL STATEMENTS CONTINUED

The State Board of Equalization has estimated that the revenue from the Transactions and Use Tax for the period April 1 to June 30, 1974 will be approximately \$7,800,000, of which the trustee had received \$1,950,000 at June 30, 1974.

NOTE F—U. S. Government Grants

The U. S. Government, under grant contracts with the District, provides financial assistance for research, beautification, certain construction projects and transit vehicle and other procurement. Additionally the District is administering federal grants to the City and County of San Francisco (CA-03-0004) for construction of three Market Street Station mezzanines, two street plazas and street extensions, and a grant to the City of Berkeley (CA-03-0009) in connection with the construction of subway extensions within Berkeley. The following grants were in force as of June 30, 1974:

Project—Purpose	Maximum Grant	Funds Received
Beautification Grants:		
CALIF-BD-1	\$ 447,953	\$ 360,000
CALIF-B-160	323,000	239,000
CALIF-B-163	521,000	367,000
OS-CA-09-39-1074	838,565	749,470
	2,130,518	1,715,470
Demonstration Grants:		
CAL-MTD-2 (Transit Design)	6,157,256	6,157,256*
CA-06-0023 (Fare Collection)	1,133,333	925,291
CAL-MTD-7 (Transit Hardware)	761,568	761,568*
CA-06-0032 (Prototype Vehicles)	5,000,000	4,500,000
	13,052,157	12,344,115
Capital Grants—Construction and Procurement:		
CA-03-0006	12,867,862	12,867,862*
CAL-UTG-11	13,103,910	13,103,910*
CA-03-0015	25,939,945	25,939,945*
CA-03-0019	88,000,000	73,446,575
CA-03-0047	1,000,000	454,000
CA-03-0052	38,136,666	20,444,000
CA-03-0058	1,700,000	1,388,000
CA-03-0059	61,845,066	12,224,000
CA-03-0069	21,681,333	2,908,000
CA-03-0083	1,172,000	—
	265,446,782	162,778,292
CA-03-0004 (San Francisco)	19,902,430	16,072,600
CA-03-0009 (Berkeley)	4,733,000	4,733,000*
	290,082,212	183,581,892
	\$305,264,867	\$197,641,477

*Project completed.

NOTE G—State of California Grant

Pursuant to Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. Under Section 30778 of the Code, further modified by an agreement with the State Department of Public Works, the District will reimburse the State for costs of the tube approaches. At June 30, 1974, the District had received \$2,513,000 of which \$55,610,531 is repayable to the State of California for the tube approaches. Reimbursement will be fulfilled by application of a \$10,500,000 credit to the District arising from highway improvements constructed with District funds on State Route No. 24 and by payment of \$1,000,000 on December 31, 1977, and \$2,500,000 annually beginning December 31, 1978.

NOTE H—Reserve for Self-Insurance

The reserve for self-insurance is presently limited, by resolution of the Board of Directors of the District, to a maximum of \$6 million (1973, \$15 million) to provide for uninsured general liability and property damage and workmen's compensation exposure at June 30, 1974.

NOTE I—Construction in Progress

During the years, construction in progress decreased as follows:

	Year Ended June 30	
	1974	1973
Balance at beginning of year	\$562,279,087	\$1,141,867,278
Add:		
Construction	82,120,740	118,829,635
Real estate acquired	606,616	3,263,925
Utility relocation	(46,732)	1,049,744
Pre-full revenue operating expenses	21,874,681	13,482,330
Other	837,125	584,882
	105,392,430	137,210,516
Less:		
Rental income and proceeds from sales of real estate	174,230	463,717
Insurance premiums refunded	21,562	35,823
Transfers to facilities, property and equipment	607,726,380	715,151,524
Transfers to materials and supplies	705,261	732,730
Other transfers	(83,898)	414,913
	606,543,535	716,798,707
	503,151,105	579,568,191
Balance at end of year	\$ 59,127,982	\$ 562,279,087

An analysis of project costs, based upon information available at June 30, 1974, was developed to determine the estimated cost of the rapid transit system at completion. This estimate amounts to \$1,006,681,000 (including \$179,878,000 for the trans-bay tube being financed by the State of California and \$160,819,000 for transit vehicles being financed by Federal grant funds and other District sources). Presently, the final cost of the system cannot be determined, as future economic conditions, resolution of pending contractors' claims (Note J) and delay in start of full revenue operations may have a significant effect on the final cost of the system. Initial operation of the system began in September 1972. All 71 miles of rapid transit line were in regular passenger service on September 16, 1974.

NOTE J—Litigation and Other Disputes with Contractors

The District has filed suit against its consulting engineer, PB-TB, two of its primary contractors, Rohr and Westinghouse, a subcontractor, Bulova, and the primary contractors' respective sureties, seeking in damages \$86.8 million from PB-TB, approximately \$41 million from Rohr, \$55 million from Westinghouse, \$4.5 million from Westinghouse and Bulova jointly, and in addition, \$50 million for loss of revenue from Rohr, Westinghouse, and PB-TB. Special Trial Counsel is unable to comment on the District's ultimate recovery under this action. Some of the defendants may enter cross-claims against the District. The ultimate liability, if any, with respect to such cross-claims is unknown.

In addition, contractor claims amounting to approximately \$28 million have been submitted to the District. It is anticipated that additional such claims will be submitted in the future. Special Trial Counsel is unable to comment on the District's ultimate liability, if any, for these claims since they involve substantial factual and legal disputes which have not yet been fully analyzed.

A taxpayers' class action suit has also been filed against certain of the District's contractors, including PB-TB, to recover public funds alleged to have been illegally expended. (The District, certain of its directors and its former general manager are also defendants.) However, since this action was commenced on behalf of taxpayers, Legal Counsel is of the opinion that any recovery, less attorneys' fees to plaintiff's counsel, should go to the District.

**Report of
Independent Accountants**

ONE MARITIME PLAZA
SAN FRANCISCO CALIFORNIA 94111

December 16, 1974

Board of Directors
San Francisco Bay Area Rapid Transit District
Oakland, California

We have examined the balance sheet of the San Francisco Bay Area Rapid Transit District as of June 30, 1974 and 1973, and the related statements of operations, accumulated net revenues, revenues, expenses and fund balances of debt service funds, and changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As explained in Note A, certain pre-full revenue operating costs amounting to \$15,000,000, which were incurred after achieving substantial revenue operations, were capitalized in the year ended June 30, 1974. Under generally accepted accounting principles, these costs should not be capitalized. As a result, facilities, property and equipment and accumulated net revenues at June 30, 1974 are overstated by this amount.

In our opinion, except as discussed above, the aforementioned financial statements present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1974 and 1973, and the results of its operations, revenues, expenses and fund balances of debt service funds, and changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Janice Ross & Co.
Certified Public Accountants

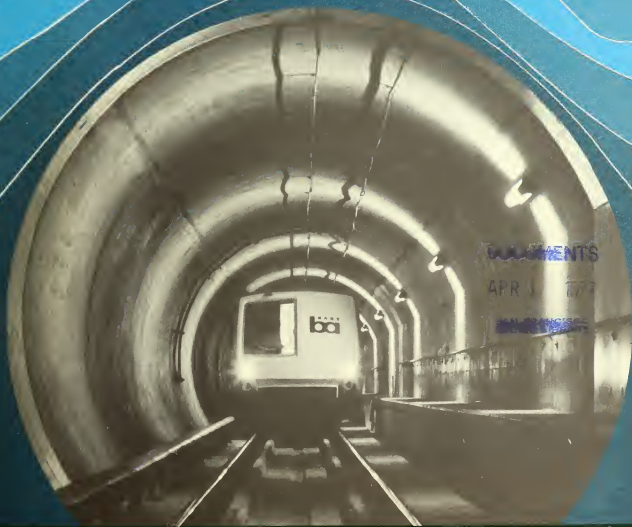


San Francisco Bay Area Rapid Transit District

This Annual Report for the period July 1, 1973 to June 30, 1974 is published by the District pursuant to Article 28770 of the State of California Public Utilities Code. District Headquarters are located at 600 Madison Street, Oakland, California 94607. Telephone 415-405-4100.

San Francisco
Bay Area
Rapid Transit
District

**1974/75
ANNUAL
REPORT**



At its formation in 1957, the District was governed by a 16-member Board of Directors apportioned according to the populations of the five member counties: Alameda, Contra Costa, Marin, San Mateo, and San Francisco. San Mateo and Marin counties officially withdrew in April and May, 1962, respectively, reducing the Board to 11 members representing the three remaining counties. Legislation was enacted in 1965, entitling less populous Contra Costa County to a fourth director. Henceforth, four Directors from each county were seated on a 12-member Board. Six members were appointed by the Boards of Supervisors from their respective counties. Six members were appointed by mayoral committees of Alameda and Contra Costa counties, and by the Mayor of San Francisco City & County. Under Chapter 521 of the California Statutes of 1973, the appointed Board was succeeded by the District's first elective Board as of 12 o'clock noon, November 29, 1974.

APPOINTED BOARD OF DIRECTORS

ALAMEDA COUNTY

RICHARD O. CLARK

H.R. LANGE

Vice-President

GEORGE M. SILLIMAN

DeWITT C. WILSON

CONTRA COSTA COUNTY

NELLO J. BIANCO

President

DANIEL C. HELIX

JAMES D. HILL

DANA MURDOCK

CITY & COUNTY OF SAN FRANCISCO

WILLIAM H. CHESTER

THOMAS F. HAYES

QUENTIN L. KOPP

WILLIAM M. REEDY

OFFICERS

L. D. DAHMS

Acting General Manager

M. BARRETT

General Counsel

W. F. GOELZ

Director of Finance

R. J. SHEPHARD

Secretary

DEPARTMENT HEADS

C. K. BERNARD

Marketing & Research

M. K. BOWERS

Employee Relations

R. W. CARROLL

System Maintenance

M. A. DENOWITZ

Quality Control

J. B. FENDEL

Construction

W. F. HEIN

Planning

C. O. KRAMER

Safety

R. M. LINDSEY

Police Services

W. J. RHINE

Engineering

G. H. RINGENBERG

Procurement & Capital

Program Management

A. E. WOLF

Transportation

The Cover: Silver BART trains speed through twin bores of the 3.6-mile transbay tube. When the trains are past, stillness is virtually absolute in the steel and concrete structure lying 75 to 135 feet under the Bay. Excellent ventilation prevents heat build-up from trains, keeping tube temperatures between 65-68 degrees the year around.

San Francisco Bay Area Rapid Transit District: Established by the State of California in 1957, Authorized to finance, construct and operate a new high-speed rapid transit system under the direction of a Board of Directors whose members are elected for four-year terms by residents of nine election districts within the counties of Alameda, Contra Costa, and San Francisco.

P RESIDENT'S MESSAGE

The 1974-75 fiscal year was a landmark year for BART in many respects.

One reason, of course, is the start-up of transbay service on September 16. This long-awaited event not only had an immediate and vital impact on the Bay Area, it signaled BART's full transition from construction, through start-up stages, to a fully operational 71-mile system. As a member of the District Board since March, 1970, I had the privilege of working with a number of very able Directors, who were appointed by the Mayors or Supervisors of their home counties. It was entirely fitting that the start-up of transbay service was presided over by our former President, Nello Bianco, and other appointed Directors who made great personal contributions to the administration of the District over the year.

President Clark is host to group of Bay Area biking enthusiasts on opening day of "Bikes on BART" program.



Also during the past year, we welcomed a new elected Board, which took office on December 2 after an overwhelming vote in the June primaries to make the BART Directors directly responsible to the people. Certainly, BART taxpayers can take encouragement in this Board's fiscal tough-mindedness. It insisted, for example, that available resources be used to improve existing service before taking on added costs of late night service. At the same time, it directed the staff to investigate all avenues of additional funds so late night service could begin as soon as possible.* To preserve the District's fiscal integrity in the months ahead, it severely reduced appropriations for the 1975-76 budget.

And certainly, BART patrons can take encouragement from the Board's determination to keep the District responsive to their needs and opinions. The Board has authorized each member to select up to 10 "BART Community Advisors" to help keep himself or herself well informed. In addition, a BART "con-

*NOTE: Later in 1975, the Metropolitan Transportation Commission approved \$1.6 million in federal and local (TDA) funds specifically for BART late night service. Special late night service for Christmas shoppers was to commence on November 28, and was to be made permanent as of January 1, 1976.

sumer panel" of 1,000 passengers has been organized for regular surveying of their opinions about the system. This is in addition to our annual statewide "passenger profile" survey.

The start-up in March of Muni fare discounts for BART-Muni riders, somewhat similar to the BART-AC Transit plan, was aggressively pushed by the new Board. To keep the District a fair and "humanized" place to work, it closely monitors affirmative action policies. To keep the system "humanized" for patrons, the Board also continuously monitors improvements in station aesthetics and art decoration.

Particularly gratifying to me is the success of our "Bikes on BART" test program. Since January, we've issued almost 1,000 permits enabling patrons to carry regular bikes on board trains in off-peak hours. I was delighted to sign up for the first permit myself. Now, more than 100 passengers a week are transporting their bicycles on the system; and we are receiving requests on this innovative program from transit lines around the world. We've experienced no serious problems in the test program thus far, and I look forward to a permanent "Bikes on BART" policy when the test program ends in December.

We can take particular encouragement in the Board's appointment of Frank C. Herringer, formerly the Administrator of the U.S. Urban Mass Transportation Administration, as the new General Manager, which was announced in April and took effect as of July 1, 1975. The Directors spent a tremendous amount of their personal time attempting to seek out the best person for the post, and we are delighted that Mr. Herringer chose to join us.

We are deeply indebted to the State Legislators who, by extending the half-cent sales tax, have kept the system from closing. Again, we acknowledge invaluable assistance from the California Public Utilities Commission, the Urban Mass Transportation Administration, the Metropolitan Transportation Commission, the other transit operators in the Bay Area, the University of California Lawrence Berkeley Laboratory, and many others who have helped us in this last year.

Lastly, I thank my fellow Directors for their spirit of cooperation and congratulate them on so ably representing the interests of their constituents.

Richard O. Clark

Preparation of the District operating budget for submittal to the Directors each spring is a major management responsibility. Analyzing computer "cost center" printouts are (left to right): Systems & Data Processing Manager Roy Knapp, Marketing & Research Director Keith Bernard, and Senior Economic Analyst Ward Belding.



MANAGEMENT OVERVIEW

Extension of the BART half-cent sale tax to help meet operating expenses seating of the first elective Board of Directors, and appointment of a new general manager, were key events of the report period which had far-reaching impact on the District.

District officials had warned that the system would have to be shut down by October 1 if additional sources of operating funds were not obtained. In April 1974, Senate Bill 1966 was introduced into the State Legislature, co-authored by Senator James Mills (D-San Diego) and Assemblyman Leo McCarthy (D-San Francisco). The Bill provided for extension of the BART half-cent sale tax for two years, until December, 1977 or until the District received \$82.2 million in tax revenues within that period to help finance its operating costs. The passage of SB 1966, and with it the future of the District, remained uncertain throughout the summer of 1974. Nevertheless, BART pushed ahead hopefully with preparations for the start up of transbay service.

On September 16, the first revenue trains began speeding passengers through the transbay tube — with the final decision on a system shutdown only two weeks away. On September 26 the crisis was finally resolved when Governor Ronald Reagan signed SB 1966 into law. With additional sales tax revenues thus assured through 1977 the District immediately began preparations for issuance of short-term bonds against the assured revenues to obtain the critically-needed operating funds. On March 13, \$16 million of 5.15 percent bonds were issued, per the ceiling set by the new law for the 1974-75 period.

Meanwhile, Measure A, calling for a nine-member elected Board from nine new election districts (replacing the 12-member appointed Board), had passed in the June primaries by a decisive 3:1 average margin in the three BART counties. The November 5 general election saw 138 candidates running in the nine Board contests. Three incumbent Directors (Nello Bianco, Richard Clark, James Hill) were successful in their campaigns.

The last major action under the appointed Board was the November 18

filing of a law suit by the District, seeking over \$200 million in damages from defendants: Parsons, Brinckerhoff-Tudor-Bechtel, Westinghouse Electric Corporation, Rohr Industries, Inc., Bulova Watch Company, and their respective surety companies.

The new Board was sworn into office on December 2 by Alameda County Presiding Judge Spurgeon Avakian. Terms of office were four years. However, to create future staggered terms, it was determined by lot that Directors representing odd-numbered districts would initially serve two-year terms.

On January 21, a "management audit" of the District was presented to the State Senate Public Utilities, Transit and Energy Committee by its consultants, Cresap, McCormick and Paget Inc. Following a series of workshop sessions with the CMP staff, District management was able to report many of the recommendations accomplished or well underway.

A major CMP recommendation was to defer plans for late night service until the reliability of existing service could be improved, particularly through more effective preventive maintenance controls and programs. The new Board of Directors, in complete agreement with the recommendation, deferred late night service — which had been scheduled for spring — to make improvement in system reliability the highest priority objective.

Another CMP recommendation, calling for more flexible procurement procedures, subsequently resulted in the passage of Senate Bill 1151 (Alquist, D-San Jose) in September, 1975. Aimed at cutting expensive delays in procurement, the bill raised the required go-to-bid level from \$3,000 to \$10,000 and the General Manager's contract authority from \$10,000 to \$25,000. It also authorized direct procurement without bidding in emergency situations. Internally, the District procurement activity was reorganized to increase its effectiveness.

On April 25, the new Board held its first major press conference to announce the appointment of Frank C. Terringer, Administrator of the U.S. Urban Mass Transportation Administration in Washington, D.C., as District General Manager, effective July 1. He succeeds B.R. Stokes, who resigned as of June 30, 1974, after serving in that post for 11 years. Acting General Manager for the interim period was Lawrence J. Dahms, previously Assistant General Manager - Operations.

Finance Actual funded operating expenses for fiscal 1974-75 were \$49.8 million against an operating budget of

\$52.5 million (amended by Board Action from \$53.8 million). Underspending essentially reflected a postponement of extended service hours. The advent of transbay service resulted in a 150 percent rise in passenger revenues over the previous period, with expected increases in average fares and length of trips (see Operating Statistics).

Major sources of income and expenses are shown in pie charts on page 13, and in the Statement of Operations on page 9. Lesser sources of income included revenues of \$282,800 from District property rentals, leases and sales. Revenues from system concessions — including newsstands, vending machines, parcel lockers and public telephones — totaled \$62,800. Other miscellaneous revenues were: system display advertising \$291,731, parking citations \$23,000, and parking fees \$10,000. A dividend of \$568,545 was received from the Workers' Compensation Insurance carrier — a continuing benefit from the District's construction insurance program which has returned \$5.2 million in dividends to date.

Traction power costs were \$2.3 million. Real estate costs were \$1.6 million, which included closeout of 42 special construction access areas, and acquisition of 23 land parcels, both for right-of-way purposes. Two of the major commercial parcels acquired were for construction of Civic Center Station Entrance #3.

A central issue in the Board's deliberations on the 1975-76 budget during May and June was the widening gap between operating costs and projected revenues — despite extended sales tax revenues from SB 1966. Sharing the Board's grave concern over the unfunded deficit projected into the next period was State Legislative Analyst A. Alan Post. In his June 16 report to the Legislature, Post called on the Board to use "all possible means" to lower the deficit, including deep budget and staff cutbacks, fare increases, and indefinite deferral of night service.

The Board subsequently approved a fiscal 1975-76 budget of \$65.6 million, a severely pared-down figure it considered the absolute minimum required to maintain existing (6 a.m. to 8 p.m. weekdays) service. Late night service, deferred earlier as previously mentioned, was indefinitely deferred in the 1975-76 period, until new funding could be obtained for that special purpose.

At the same time, the Board approved an across-the-board fare increase to be implemented in the next period. (As later specified by the Board, the increases averaged 21 percent. Maximum fares increased from \$1.25 to \$1.45. Minimum fares remained at 30 cents, except in

downtown San Francisco and Oakland, where they were reduced to 25 cents.)

Despite the austere level approved for the next period's budget, and despite higher revenues expected from the coming fare increases, it was clear that the central issue of permanent, stable funding for the District would dominate the 1975-76 fiscal year.

Final approval for federally funded grants and projects was received as follows: \$7.2 million to fund system start-up costs and hardware improvements; and \$3.6 million for design and construction of the Daly City Station parking structure. Tentative approval was received of a \$100,000 grant for system reliability studies by BART's engineering task force teams. AC Transit received a \$2.6 million grant toward the purchase of 36 buses and facilities for five feeder express bus lines it operates for BART between transit stations and outlying East Bay communities.

District Property Tax For funding of administrative expenses and debt service on BART construction bonds, rates (in cents) were set by the Board as follows:

	Admin. Expenses	1975-76 Debt Service	Total Rate	1974-75 Total Rate
Alameda	5.0	42.1	47.1	54.0
Contra Costa	4.7	40.0	44.7	51.2
San Francisco	5.3	44.6	49.9	56.1

NOTE: Property tax rates are per \$100 assessed property value. Different tax rates reflect equalization of varying assessment ratios among counties.

Staffing The total staff increased from 1,696 to 1,937 during the period, reflecting continued build-up of transportation and maintenance areas to support transbay service. Employee minority representation continued to exceed the District population minority ratio of 32%, increasing from 37% to 39.3%.

Of major significance was the Board's adoption in September of a broad new Affirmative Action Program setting forth, among other goals, timetables for increasing representation of minority employees and women employees across job classifications and job levels. An Equal Employment Opportunity Officer was appointed to administer expanding AA activities, along with the AA Officer appointed in the previous period. In October, the new program was approved by the Office of Federal Contract Compliance.

The first day of transbay service saw trains crowded with passengers who made their first trip beneath San Francisco Bay with reactions ranging from studied casualness to wide-eyed excitement.



OPERATIONS & SERVICES

The previous period closed with 64 of the system's 71.5 miles, and 32 of its 34 stations, operational. Twelve trains, generally of four-car consists, were operating between Richmond and Fremont; and six trains, of maximum six-car consists, were operating between Concord and Oakland's MacArthur Station. Four trains, of seven-car consists, were in temporary shuttle service between San Francisco's Montgomery Street Station and the Daly City Station, awaiting the opening of the 7.5-mile transbay tube line. Headways were 10 minutes systemwide. Revenue service continued on the limited schedule of 6 a.m. to 8 p.m. weekdays, in force since the system opened in September 1972.

The transition from two-station train separation to one-station separation — considered essential to efficient transbay operation — was successfully demonstrated by July, 1974. The California Public Utilities Commission rapidly approved the District plans for transbay operations under computer-controlled one-station separation. The opening day of transbay service was set by the District Board for Monday, September 16. Thus, at long last ... a crossing beneath the waters of San Francisco Bay was about to become a reality for the public!

The Monday opening of transbay service was preceded by colorful ceremonies on September 14 (Saturday) at the Lake Merritt, Oakland West, and Powell Street stations. Many local and state officials and civic leaders attended the dedication ceremonies, presided over by Oakland's Mayor John Reading and San Francisco's Mayor Joseph Alioto. Four trains shuttled between Montgomery and Coliseum stations from noon to 6 p.m. to introduce the public to its first transbay rides.

With the opening of regular transbay revenue service on September 16, system operations expanded from 22 to 30 trains, in consists up to nine cars. Ten trains operated on each of three routes: Fremont transbay to Daly City, Concord transbay to Daly City, and Richmond (East Bay only) to Fremont. The system's fourth route — Richmond transbay to San Francisco — was not

OPERATING STATISTICS

	FY 1974/75	FY 1973/74
July 1 — June 30, inclusive		
Total Car Miles (revenue service only)	21,465,055	10,758,626
Total Passenger Trips (patronage)	27,876,794	13,960,680
Passenger Miles (estimated)	434,648,927	166,033,664
Ridership Ratio (at period's end)		
Peak	59%	58%
Off-Peak	41%	42%
Net Passenger Revenues (less fare discounts and other adjustments)	\$15,694,768	\$ 6,055,969
Average Passenger Fare (with discount fares considered at full value)	60.3 cents	47.7 cents
Average Trip Length (based on estimated passenger miles which include an allowance for excursion rides)	15.6 miles	11.9 miles

activated. Richmond line patrons transferred to transbay trains at MacArthur Station.

The advent of transbay service immediately increased average daily patronage from 69,000 to 113,622 (58 percent), and peak-hour patronage from 40,433 to 62,536 (54 percent).

Second quarter patronage was up 57 percent over the first quarter, to 122,908 daily. The substantial increase was attributed to transbay service, three World Series games, and extended service hours (to 10 p.m.) for shoppers between November 29 and December 27. BART carried 11,000 fans to and from each World Series game (October 15, 16, 17), which was 23 percent of total game attendance. A record 163,408 for daily ridership was set the day after Thanksgiving (November 29), eclipsing the previous high of 110,104 set the prior year on the same day. Extending service until 10 p.m. during the Christmas shopping season resulted in daily increases of 3,600 to 4,200 trips after 8:30 p.m.

The third quarter saw a 5.7 percent decline in patronage from the second quarter to 116,587. Patronage dropped almost 12,000 from December to February, with 75 percent of the decrease in off-peak ridership. It is difficult to assess all possible factors involved in the off-peak decline. More certain, however, is the adverse impact of frequent service delays, and crowded trains resulting from continued shortages of t-cars, on peak-hour ridership.

Fourth quarter patronage saw a slight daily average increase to 118,895. As seen in the period's operating statistics, transbay service substantially increased the system average fare and average trip length. Surprisingly modest, however, was the estimated increase of daily transbay trips between October and June: 51,465 to 54,359. High month was December with a 126,540 average; low month was February with 114,348.

System Safety The period passed with 40 accidents in revenue operation. Minor incidents reported in stations and trains declined substantially. A total of \$92,199 was paid out on 164 patron accident claims: 114 in stations, 49 on trains, and one elsewhere. The ratio of reported accidents per million passengers carried decreased 34 percent from previous period, reflecting an intensive program to eliminate, or improve, problem areas causing minor accidents in stations and trains.

The Coliseum Walkway opened for World Series games (October 15, 16, 17), but was shut down October 18 because of uncomfortable swaying. The

designer, Skidmore, Owings & Merrill, was directed to reinforce the walkway structure, and it is scheduled to re-open by early October, 1975.

On Sunday, January 19, at 10:15 p.m., a nine-car test train collided with a maintenance vehicle, which, due to driver error, was on the wrong mainline track near the Oakland Shop. Maintenance worker Arthur L. Briggs was killed instantly.

On Monday, January 27, at 3 p.m., an A-car was uncoupled from its consist at MacArthur Station. Improperly chocked, it rolled free down the mainline almost to Lake Merritt Station before coming to a stop. No equipment was damaged and no trains were endangered.

Both incidents, although caused by human error, touched off a thorough analysis of existing operating procedures by the District and the California Public Utilities Commission. A new Safety Department was established in February, whose broadened responsibilities included a safety-oriented review of all operating procedures. In April, three task force teams were established to explore and resolve safety-reliability problems in Central Train Control, wayside equipment, and the vehicles. The operating rules manual was completely revised and awaited printing in June.

The District's comprehensive procedures for fires or other major disasters were tested in a simulated train accident on May 31 at the South Hayward Station. The District was cited by a major newspaper as one of the few agencies prepared with such a disaster plan.

The ratio of reported crimes on the system decreased from 149 per million passenger trips in the previous period to 98 this period. Major categories continued to be auto burglary and theft, petty theft, vandalism, and fare evasion. Physical crimes against patrons continued to be rare. BART Police made 401 arrests and regularly apprehended fugitives wanted by other police departments.

Passenger Service Increasing parking problems at a number of stations became a high priority concern of the District. Final design was approved for the Daly City parking structure, which will double the original 800-car capacity of the parking lot. Construction is scheduled to begin in October, 1975, and end in July, 1977. Parking stalls at Hayward were increased by 165 and at Union City by 325. Plans were underway for adding 400 more stalls at South Hayward, 400 at Fremont, 300 at Lafayette, and lesser additions at Concord, Pleas-

ant Hill, Walnut Creek, Orinda and El Cerrito Del Norte.

Reliability of fare equipment continued to be satisfactory. An additional 74 IBM equipment units were installed to increase capacities at 23 stations. IBM then withdrew as equipment supplier. A contract was awarded to Western Data Products, Inc., a subsidiary of Cubic Corporation, for 180 units costing \$6.2 million. In the next period, 163 Cubic units will be installed in 34 stations, including the Embarcadero Station opening in 1976.

An experimental program to encourage car pooling by reserving stalls for pool cars was dropped at Orinda and Lafayette Stations after two months due to lack of interest by the patrons.

New fare policies were adopted on trial bases by the Board as follows: free rides for children under age five (effective January 24); excursion fares raised from 60 cents to \$1, and the 75 percent discount extended to high school students on chaperoned school tours (both effective February 10); the 75 percent discount extended to persons certified as handicapped, and the existing 75 percent discount for senior citizens raised to 90 percent (both effective July 1).

In January, "Bikes on BART" got underway — an 11-month experimental program to determine if bicycles could be feasibly transported on trains during off-peak hours. Permits were issued to almost 1,000 bicyclists in a closely controlled sign-up program. By June, an average of 110 patrons per week were transporting their bicycles on the system without problems, and the program was considered successful.

As of March 10, two-part Muni bus tickets were available from dispensing machines in BART's eight San Francisco line stations. For the price of one regular Muni fare (25 cents), BART patrons receive tickets for two rides either to or from BART stations.

On December 2, the District began running five express bus lines (contracted out to AC Transit as operator) from BART stations to the areas of Pinole, Dublin, San Ramon, Pleasanton, Livermore, Martinez, Pittsburg, Antioch, and Brentwood. A trial program, the combined daily ridership of the five routes rose from 1,700 in December to 2,400 in May. In June, BART Directors extended the trial program through November, 1975.

Task force teams of BART engineers and outside consultants put in long hours aboard test trains, analyzing complex problems, and working out solutions to improve fleet reliability.



SYSTEM SUPPORT

Heavy activity continued in the engineering and maintenance areas, aimed at improving system reliability and efficiency, with emphasis on problems involving vehicle and train control components.

The summer months preceding the September 16 start-up of transbay service called for particularly close coordination between transportation and technical personnel to ready the organization for a swift expansion, both in train operations and support activities.

Car availability (i.e. ratio of cars available for revenue service out of total fleet) was the leading common problem shared by transportation, maintenance, and engineering personnel throughout the period. In June, 1974, average daily availability was 45 percent, or 131 out of 291 cars on hand. Availability rose to 150-160 cars during the summer.

Transbay service started at a 200-car level of availability, which continued until November. Availability then fell off to the 180-190 car range in the third quarter, hitting a low of 160 cars during February. From May forward, availability was generally up in the 220-240 range. In the ending month of June, 1975, availability averaged 219 out of the current 408 fleet total (54 percent).

Besides the ongoing shortage of spare parts, low reliability of major components and subsystems was another factor in the period's discouraging car availability levels. Test work and accident damage also kept some cars out of revenue service.

With the system in transbay service and 30 trains operating from October, 1974, to June, 1975, non-scheduled train removals for that period averaged 15 per day. The average rose from 12.7 in October to 17.6 for June. The average for the previous fiscal period was 10.4 trains per day out of 22 operating. (Note: non-scheduled removals can be for minor reasons, such as lost windshield wipers, as well as for major equipment malfunctions.)

Actual round trips completed by all trains (including replacement trains) for the period was 89 percent of the trips scheduled.

Technical Work In October, a special task force of engineers was established

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ELECTED BOARD OF DIRECTORS

San Francisco Bay Area Rapid Transit District



The first elected Board of Directors in the history of the District succeeded the previous appointed Board as of 12 o'clock noon on November 29, 1974. The nine members of the Board were elected on November 5 directly by the people of the nine voting districts shown on centerspread map. Directors' terms expire on November 26, 1976 for odd-numbered districts, and on November 24, 1978 for even-numbered districts. After the 1976 elections, all Directors' terms will be four years.

JAMES D. HILL, District 1 — Appointed to the Board February 13, 1974, by the Contra Costa Mayors' Conference. Chairperson of Public Information & Legislation and Special Ways & Means committees, and Vice Chairperson of the Engineering Committee in 1975. Formerly held series of Walnut Creek posts: Mayor, 1973-74; Vice Mayor and Councilman,

1972-73; Chairman and Vice Chairman of Planning Commission, 1969-72. Attorney in private law practice in Bay Area since 1962. Member of Commonwealth Club and active in other professional and civic organizations, and has authored articles for legal journals in areas of



real estate, trusts and estate law. Formerly, Director of the Contra Costa Chapter of the American Cancer Society, in Cub Scouts, and Toastmasters International. Born in Muskogee, Oklahoma. Received Bachelor of Arts degree from University of Nevada, and Juris Doctor degree from the University of Denver. Resides in Walnut Creek where he has law practice.

NELLO J. BIANCO, District 2 — Appointed to the Board September 23, 1969, by Contra Costa Supervisors, and is now its senior member. President in 1974 of last appointed Board, Vice President in 1973. Member of Public Information & Legislation and Special Ways & Means committees, also alternate on Administration Committee, in 1975. Chairperson of

Board of Control which directed BART extension study in Pittsburg-Antioch area. A Richmond businessman, and formerly very active Councilman in that city. Initiated the District's association with the University of California Lawrence Berkeley Laboratory, which



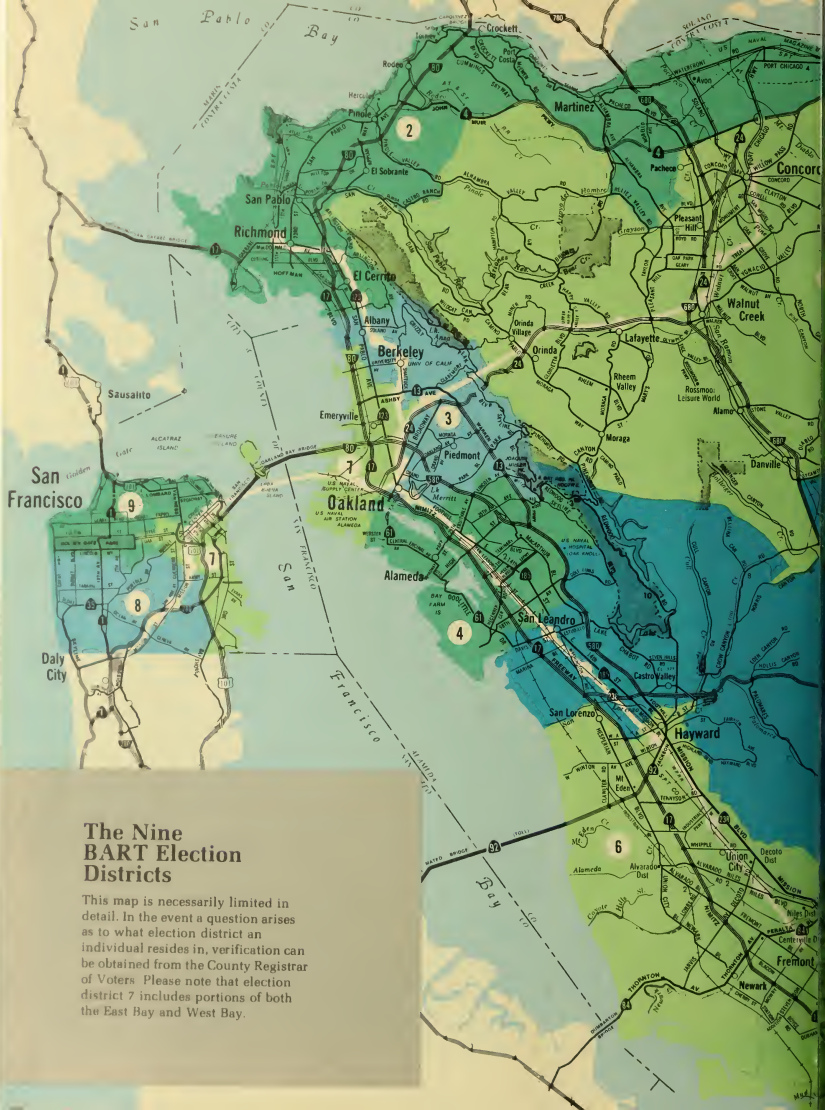
has been a major factor in solving technical problems on the system. Currently is a Director of the American Public Transit Association, Richmond Boys' Club of America, and East Bay Chapter of the National Safety Council. Born in Weed, California, and attended Golden Gate College in San Francisco. Resides in Richmond with wife Betty and three children.

RICHARD O. CLARK, District 3 — Appointed to the Board on March 4, 1970, by the Mayor's Conference of Alameda County. First President of the elective Board in 1975, member of all standing committees. Currently serving four-year term as a member of the California Department of Transportation Advisory Committee. Formerly served on the Executive Committee

of the Association of Bay Area Governments; formerly served as Mayor, Vice Mayor, and Councilperson of the City of Albany. Other community affiliations include the March of Dimes, American Cancer Society, Parent-Teacher Association, and Chamber of Commerce. Business:

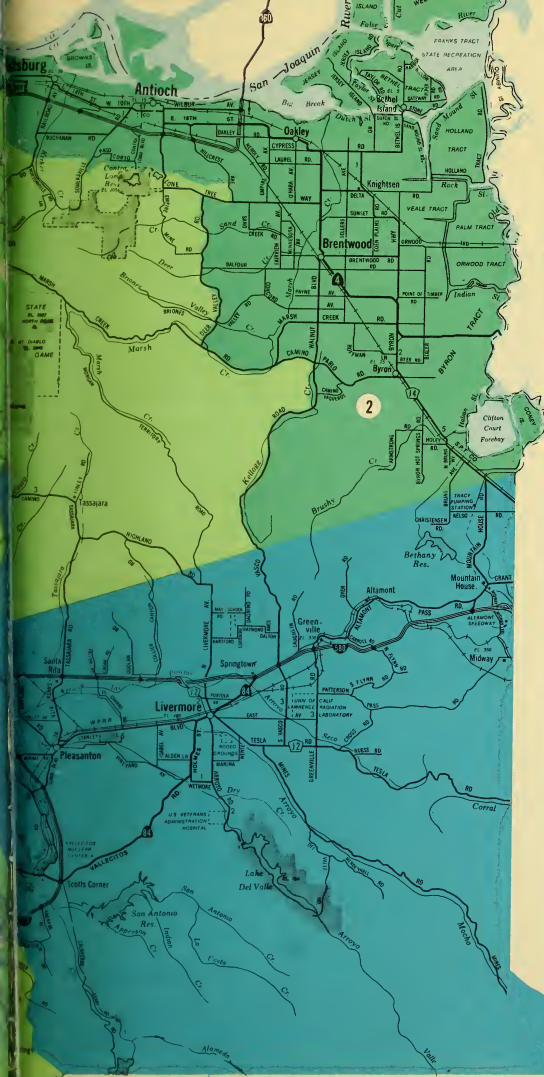


real estate and economic development consultant, Oakland. Born in Kansas City, Missouri. Attended public schools in Oakland and Piedmont; graduated from St. Mary's College, Moraga, with Bachelor of Arts degree in history. Resident of Alameda County for 40 years. Lieutenant Colonel, U.S. Marine Corps Reserve, and commanding officer of a transport helicopter squadron.



The Nine BART Election Districts

This map is necessarily limited in detail. In the event a question arises as to what election district an individual resides in, verification can be obtained from the County Registrar of Voters. Please note that election district 7 includes portions of both the East Bay and West Bay.



FRANK C. HERRINGER, General Manager — Appointed by District Board to his post on April 24, 1975, to become effective July 1. At time of appointment, was Administrator of U.S. Urban Mass Transportation Administration, Washington, D.C., responsible for administering \$1.5 billion in federal monies annually for mass transit building, research, and development programs.



Recognized as major architect of the National Mass Transportation Assistance Act of 1974, which established an initial \$11.8 billion federal program to revitalize public transit nationwide. Cited by U.S. Secretary of Transportation for outstanding managerial achievements as UMPTA Administrator. Formerly on White House staff, responsible for selection of presidential appointees in numerous federal agencies. Prior to entering government service, was a Principal in the management consulting firm of Cresap, McCormick and Paget Inc. Honors graduate of Dartmouth College (mathematics and economics) and its Amos Tuck School of Business Administration (M.B.A.). Born in New York City, raised in Seaford, L.I. Resides in Lafayette with wife Nancy.

HARVEY W. GLASSER, M.D., District 4 — Chairperson of Engineering Committee and Vice Chairperson of Administration Committee in 1975. Bay Area resident since 1959. Founder and President of California Health Services, a hospital consulting and management firm in Alameda. Ardent conservationist and outdoorsman; member of Sierra Club,



Oceanic Society, and the Commonwealth Club. Board member of the Exploratorium, San Francisco. Former President and Board Chairman of the Wright Institute, Berkeley. Born and raised in Chicago and nearby Glencoe. Attended University of Illinois and Sorbonne

in Paris. Graduated from University of Chicago School of Medicine in 1959. Served residencies in psychiatry at Stanford University Hospital, Palo Alto, and Mt. Zion Hospital, San Francisco. Also served for two years in U.S. Public Health Service hospitals at Staten Island, New York, and Lexington, Kentucky. Resides in Alameda with wife Cynthia and three children.

ROBERT S. ALLEN, District 5 — Engineering Cost Analyst for Southern Pacific's Western Division. Formerly Classification Analyst at University of California's Lawrence Livermore Laboratory; in engineering and operations with the Denver & Rio Grande Western Railroad; and Civilian Administrative Assistant with the Colorado National Guard. Chairman



of Board of Control for Livermore-Pleasanton BART rail extension. Member of American Railway Engineering Association (AREA) and its Committee on Systems Engineering. Elder and Priesthood Chorister, Livermore 2nd Ward, the Church of Jesus Christ of Latter-day

Saints (Mormon). Treasurer of American Taxpayers Union Local #115 and Alameda County Central Committee, American Independent Party. Active in Scouting. Born in Chicago. Attended Rensselaer Polytechnic Institute in Troy, New York; received Bachelor of Science degree in accounting from the University of Colorado at Boulder; graduate business studies, Brigham Young University, Provo, Utah. Livermore resident with his family since 1958.

JOHN W. GLENN, District 6 — Member of Administration and Special Ways and Means committees in 1975. Widely known as a transit specialist and articulate industry spokesman in the insurance adjuster field. Founder and President of John Glenn, Adjustors, whose claims business is mostly with transportation companies through offices in Oakland, San



Rafael, and Portland, Oregon. Other business interests include The Royal Nu-Foam Corporation in Oakland, a California almond orchard, the Glen Cove Marina, and an apartment complex and industrial park in Richland, Washington. Associated with Transit Casualty Company

for 14 years, and was its northern California divisional claims manager prior to founding own firm in 1966. Born in Puxico, Missouri. Served in U.S. Maritime Service 1945-48. Bachelor of Science degree in marketing from Southeast Missouri State University in 1952; graduate business studies at University of Missouri and California State University at Hayward. Resides in Fremont with wife Betty and their three children.

MS. ELLA HILL HUTCH, District 7 — Chairperson of the Administration Committee, Vice Chairperson of the Public Information and Legislation Committee, and member of the Special Ways and Means Committee during 1975. Has served on the staff of a major trade union organization in San Francisco since 1953. A member of the Office and Professional



Employees International Union, Local 29, and active in a wide range of social and political causes and organizations. A member of the Democratic County Central Committee since 1966, and currently its Vice Chairperson of Issues and Resolutions. Also a member

of the State Democratic Party's Central Committee and Affirmative Action Task Force. A Trustee of the Glide Foundation and one of the founders of the Black Women Organized for Political Action. Born in Kissimmee, Florida. Studied in the areas of business and sociology at City College of San Francisco and California State University at San Francisco. Resides in San Francisco.

ELMER B. COOPER, District 8 — Vice President of the elected board in 1975 and member of all standing committees. President of Cooper & Company, a San Francisco firm specializing in urban policy planning, education consulting, and investment management. Former positions: Staff Assistant to U.S. Congressman Charles S. Joelson and House Speaker John



McCormick; Dean of Students, California State University at San Francisco 1968-69; Assistant Chancellor, Michigan State University, Michigan, 1970-72. Heads three national organizations in field of urban planning and education. Active in several U.S. senatorial campaigns and California Coastline initiative in 1972. Affiliations include Common Cause, Sierra Club, California Tomorrow, Bay Area Urban League, Save-the-Redwoods League, Commonwealth Club, and California Academy of Sciences. Born in Paterson, New Jersey. Attended universities in Washington, D.C. and Ann Arbor, Mich. San Francisco resident.

JOHN H. KIRKWOOD, District 9 — Vice Chairperson of the Special Ways and Means Committee and member of Engineering Committee in 1975. Formerly served as transit advisor to the San Francisco Planning & Urban Renewal Association (SPUR). Co-authored a long-range analysis of San Francisco's transportation needs, called "Building A New Muni." Played



an active role in the Sacramento-Stockton Bay Area Corridor Study, and the "BART Trails" study (bicycle and hiking pathways coordinated with BART). Affiliations include: Bay Area Electric Railway Association, the National Association of Railway Passengers, California

Tomorrow, Planning and Conservation League, and the World Affairs Council. Born in Palo Alto and raised in Saratoga, Sacramento and San Francisco areas. Graduated from Stanford University with a Bachelor of Arts degree. Resides in San Francisco.

to intensify investigation of vehicle reliability problems which had been keeping half the BART fleet out of revenue service. In April, this effort was expanded into three larger task forces with a total of 35 engineers, including eight specialists from Lawrence Berkeley Laboratory. Progress was reported by period's end in the general areas of (1) central control; (2) wayside train control and detection equipment; and (3) vehicle systems for propulsion, train controls, door controls, and braking. With short-range as well as long-range goals, the task forces expect to make measurable gains in system-vehicle reliability by the next period's end.

The Hayward Test Track was nearing completion by period's end, and was scheduled for activation by October, 1975. The new facility is expected to speed the problem-solving work of the task force teams, as well as modifications and day-to-day repair work on the fleet.

Improvements to the 1,000-volt D.C. traction power distribution system included increased sub-station capacities, and modifications to prevent previous failures of gap-breaker equipment. In December, discussions accelerated with the supplier, General Electric Company, regarding the cause and solution to several gap-breaker and related equipment failures which had occurred on the system.

Well underway by period's end was systemwide installation of an improved "diode array" grounding system, which will reduce stray current effects of traction power equipment on nearby metal structures.

The \$1.3 million SOR (Sequential Occupancy Release) system was tested

systemwide in April. Despite some minor reliability problems to be corrected, it was found to be satisfactory as an additional train protection (anti-collision) system. When satisfactorily demonstrated in conjunction with train stopping capabilities under adverse weather conditions, the SOR will allow headways shorter than the one-station separation constraint now in effect.

Maintenance Major effort was aimed at improving both administrative controls and technology in the complex area of fleet maintenance. A new, computerized method of maintaining (on a daily basis) "performance profiles" for each vehicle was activated. Preventive maintenance work was reorganized throughout the fleet for greater workload efficiencies. In January, a five-man team was assigned to improve parts planning, inventory and procurement procedures in an effort to reduce vehicle downtime caused by lack of critical parts.

Vehicle reliability problems centered around propulsion and braking systems, wheel-on-axle movement, door and cab controls, air conditioning compressors, and motor alternators. The heavy demands on car repair areas led to improved troubleshooting equipment and new efficiencies in shop and yard operation in order to handle larger workloads.

Wayside equipment malfunctions (causing false track occupancy signals in the train control system) were reduced by 40 percent through extensive engineering and maintenance work.

Additional work was done to improve the system's complex network of communications for trains, stations, maintenance, police, plus equipment and

surveillance alarm systems. All subway-tunnel train radio antennas were re-anchored.

Improvement work in stations included design of platform windscreens and trackway (under-train) sprinkler systems, and installation of bus shelters. Station lighting was improved, and reduced where feasible, to conserve energy. Escalators were subject to heavy vandalism and required extensive maintenance to keep them operable.

able.

The West Portal (Muni) Station and Daly City parking structure designs were revised to effect further economies.

Construction Status of the entire BART project at period's end was 236 construction contracts completed at a cost of \$720 million. Construction-in-progress was valued at \$94.9 million, of which seven contracts valued at \$3.3 million were awarded during the period. Total value of all system facilities and equipment was estimated at \$1.621 billion.

Major projects completed were the Coliseum Walkway and the Civic Center Station Entrance #3.

Major construction work continued to center around the Outer Market subway BART is building for initial use by the San Francisco Municipal Railway (Muni). Status of major work in progress: Church Street (Muni) Station (96%), Castro Street (Muni) Station (92%), Embarcadero Station Completion (90%), and Hayward Test Track (94%). Muni Outer Market trackwork was completed. Electrification and signalization work was begun by Muni.

At District's new Hayward Test Track, the task force effort brings many kinds of engineers together to bear upon specific problems. Below: (left) Lead Mechanical Engineer Ray Crist checks recorder aboard test train; (center) Electronics Engineer Samuel Batiste checks another test installation; (right) Task Force Leader Tony Venturato discusses recorder readout with Transportation Supervisor B.J. Fraley.



FINANCIAL STATEMENTS

Balance Sheet

	June 30	
	1975	1974
Assets		
Cash (including time deposits of \$4,770,000 and \$24,728,000)	\$ 6,028,931	\$ 25,963,349
U.S. Treasury securities (Note A)	11,195,000	14,635,000
Federal Agency securities (Note A)	29,891,472	33,386,182
Other securities (Note A)	3,775,878	—
Deposits, notes and miscellaneous receivables	13,432,244	17,988,746
Construction in progress (Notes A and H)	14,430,952	59,127,982
Facilities, property and equipment (Notes A and B)	1,457,249,819	1,326,153,715
Accumulated depreciation and amortization (Notes A and B)	(48,038,470)	(22,026,578)
Materials and supplies, at average cost	4,558,183	1,880,154
Debt service funds, net assets (including time deposits of \$65,668,000 and U.S. Treasury and Federal Agency securities of \$6,598,765 in 1975 and \$54,482,900 and \$13,290,686 in 1974) (Notes C and D)	73,720,529	70,378,183
	<u>\$1,566,244,538</u>	<u>\$1,527,486,733</u>
Liabilities and Capitalization		
Construction contracts and other liabilities	\$ 32,667,460	\$ 45,491,205
Unearned fare revenue	797,242	587,135
Payable to State of California (Note F)	39,110,538	39,110,538
Sales Tax Revenue Bonds (\$24,000,000 authorized) (Note D)	16,000,000	—
Debt service funds (Notes C and D)	73,720,529	70,378,183
	162,295,769	155,567,061
Contingencies (Note I)		
Capitalization:		
Reserve for self-insurance (Note G)	6,000,000	6,000,000
General Obligation Bonds (\$812,500,000 authorized) (Note C):		
Bonds outstanding	\$762,980,000	775,450,000
Bonds matured and retired	41,020,000	28,550,000
	804,000,000	804,000,000
Sales Tax Revenue Bonds (\$150,000,000 authorized) (Note D):		
Bonds outstanding	69,395,000	101,350,000
Bonds matured and retired	80,605,000	48,650,000
	150,000,000	150,000,000
U.S. Government Grants (Note E)	254,047,780	197,641,477
State of California Grant (Note F)	116,902,462	116,902,462
Contributions from others	15,300,356	7,140,035
Depreciation and amortization of assets acquired with contributions by others (Note A)	(13,008,072)	(5,550,698)
	373,242,526	316,133,276
Accumulated net revenues before depreciation and amortization	105,736,641	112,262,276
Depreciation and amortization of assets acquired with own funds	(35,030,398)	(16,475,880)
	70,706,243	95,786,396
	<u>1,403,948,769</u>	<u>1,371,919,672</u>
	<u>\$1,566,244,538</u>	<u>\$1,527,486,733</u>

See notes to financial statements.

San Francisco Bay Area Rapid Transit District

Statement of Operations

	Year Ended June 30	
	1975	1974
Revenues:		
Operating revenues:		
Fares	\$17,211,689	\$ 6,655,808
Less discounts, transfers and other deductions	<u>(1,219,600)</u>	<u>(599,839)</u>
	15,992,089	6,055,969
Financial assistance — Transportation Development Act of 1971	729,544	807,000
Other	<u>461,789</u>	<u>187,942</u>
	17,183,422	7,050,911
Taxes	4,410,322	4,051,726
Interest and other	<u>5,840,296</u>	<u>9,010,468</u>
	27,434,040	20,113,105
Expenses:		
Transportation	11,157,482	7,646,011
Maintenance and quality control	24,056,905	15,833,084
Police services	2,025,272	1,910,689
Construction and engineering	3,611,599	2,393,925
General and administrative	<u>9,005,778</u>	<u>6,119,005</u>
	49,857,036	33,902,714
FUNDED EXCESS OF EXPENSES OVER REVENUES	22,422,996	13,789,609
Unfunded costs:		
Depreciation and amortization of all assets	26,011,892	22,026,578
Less depreciation and amortization of assets acquired with contributions by others (Note A)	<u>(7,457,374)</u>	<u>(5,550,698)</u>
	18,554,518	16,475,880
NET OPERATING LOSS	<u>\$40,977,514</u>	<u>\$30,265,489</u>

Statement of Accumulated Net Revenues

Accumulated net revenues at beginning of year	\$95,786,396	\$94,492,405
Less net operating loss	<u>(40,977,514)</u>	<u>(30,265,489)</u>
	54,808,882	64,226,916
Add:		
Start-up costs and construction overhead capitalized (Note A)	15,897,361	22,401,581
Reduction in reserve for self-insurance	<u>—0—</u>	<u>9,157,899</u>
Accumulated net revenues at end of year	<u>\$70,706,243</u>	<u>\$95,786,396</u>

See notes to financial statements.

San Francisco Bay Area Rapid Transit District

FINANCIAL STATEMENTS CONTINUED

Statement of Revenues, Expenses, and Fund Balances of Debt Service Funds

	Year Ended June 30, 1975			Year Ended June 30, 1974
	General Obligation Bonds	Sales Tax Revenue Bonds	Combined	
Revenues:				
Property taxes	\$44,216,251	\$ —0—	\$44,216,251	\$43,794,213
Transactions and use taxes received	—0—	35,828,843	35,828,843	35,326,319
Bond proceeds advanced	—0—	1,248,000	1,248,000	—0—
Interest	2,158,833	4,016,178	6,175,011	5,545,973
	<u>46,375,084</u>	<u>41,093,021</u>	<u>87,468,105</u>	<u>84,666,505</u>
Less:				
Matured interest	33,766,121	5,387,324	39,153,445	41,585,296
Matured or retired principal	12,470,000	31,955,000	44,425,000	37,410,000
Bond service expense	—0—	50,028	50,028	64,221
Bond premium	—0—	497,286	497,286	404,953
	<u>46,236,121</u>	<u>37,889,638</u>	<u>84,125,759</u>	<u>79,464,470</u>
	138,963	3,203,383	3,342,346	5,202,035
Balance at beginning of year	19,449,046	50,929,137	70,378,183	65,176,148
Balance at end of year	<u>\$19,588,009</u>	<u>\$54,132,520</u>	<u>\$73,720,529</u>	<u>\$70,378,183</u>

Statement of Changes in Financial Position

	Year Ended June 30	
	1975	1974
Financial Resources Were Used for:		
Operations:		
Net operating loss	\$ 40,977,514	\$ 30,265,489
Noncash expense — depreciation and amortization	(18,554,518)	(16,475,880)
FUNDS USED IN OPERATIONS	22,422,996	13,789,609
Additions to construction in progress and facilities, property and equipment	71,228,136	82,149,014
Bond principal	44,425,000	37,410,000
Bond interest	39,153,445	41,585,296
Decrease (increase) in construction contracts and other liabilities	12,823,745	(3,860,521)
Increase in debt service funds (net of \$1,248,000 bond proceeds advanced in 1975)	2,094,346	5,202,035
Bond premium	497,286	404,953
Other	1,791,527	502,455
	<u>\$194,436,481</u>	<u>\$177,182,841</u>
Financial Resources Were Provided by:		
Grants from U.S. Government	\$ 56,406,303	\$ 41,484,005
Property taxes	44,216,251	43,794,213
Transactions and use taxes	35,828,843	35,326,319
Decrease in cash and securities	23,093,250	39,641,355
Sales Tax Revenue Bonds issued	16,000,000	—0—
Contributions from others	8,160,321	2,478,809
Interest on investments	6,175,011	5,703,872
Decrease in deposits, notes and miscellaneous receivables	4,556,502	8,395,268
Grants from State of California	—0—	359,000
	<u>\$194,436,481</u>	<u>\$177,182,841</u>

See notes to financial statements.

NOTES TO FINANCIAL STATEMENTS

NOTES TO FINANCIAL STATEMENTS

Years ended June 30, 1975 and 1974

NOTE A — Summary of Significant Accounting Policies

The San Francisco Bay Area Rapid Transit District is a political subdivision of the State of California created by the Legislature in 1957 and regulated by the San Francisco Bay Area Rapid Transit District Act, as amended. The District does not have stockholders or equity holders and is not subject to income tax. The disbursement of all funds received by the District is controlled by statutes and by provisions of various grant contracts entered into with the State of California and the United States Government.

The District receives an allocation of property tax revenues for purposes of providing for general and administrative expenses not involving construction in progress.

Securities are carried at cost which approximates market.

The cost of acquisition and construction of rapid transit facilities is recorded in construction in progress and represents amounts paid or owing to contractors including amounts provided by State and Federal grants for construction purposes. As facilities are completed and become operative, the District transfers them to facilities, property and equipment accounts.

Depreciation on facilities, property and equipment is computed using the straight-line method over the estimated useful lives of the assets. The amount of depreciation of assets acquired with the District's own funds is distinguished from the amount of depreciation of assets acquired with contributions by others, and the latter amount is shown on the balance sheet with the related contributions. This format follows the recommendations for public transportation systems in the Industry Audit Guide "Audits of State and Local Governmental Units" prepared by the Committee on Governmental Accounting and Auditing and issued by the AICPA in September 1973.

Accounting policies for General Obligation Bonds (Note C), Sales Tax Revenue Bonds (Note D), Government Grants (Notes E and F), reserve for self-insurance (Note G) and construction in progress (Note H) are described in separate footnotes.

Since 1966, the District consistently has capitalized, as part of pre-full revenue operating expenses, certain start-up costs. The amount so capitalized for the year ended June 30, 1975, is \$10 million (\$15 million in 1974).

Certain reclassifications have been made in the 1974 financial statements to conform to the classifications used in 1975.

NOTE B — Facilities, Property and Equipment

Facilities, property and equipment (stated at cost), asset lives, and accumulated depreciation and amortization at June 30, 1975 are summarized below:

	Cost	Lives (Years)	Accumulated Depreciation and Amortization
Land	\$ 105,372,869		Nondepreciable
Improvements	1,023,807,659	80	\$25,198,775
Systemwide operation and control	83,958,497	20	8,232,844
Revenue transit vehicles	136,599,148	30	7,190,387
Service and miscellaneous equipment	8,279,442	3 to 20	1,430,239
Pre-full revenue operating expenses	94,174,492	30	5,705,389
Reparable property items	5,057,712	30	280,836
	<u>\$1,457,249,819</u>		<u>\$48,038,470</u>

NOTE C — General Obligation Bonds

In 1962, voters of the member counties of the District authorized a bonded indebtedness totaling \$792,000,000 of General Obligation Bonds. Bonds

amounting to \$752,450,000 were outstanding at June 30, 1975, with principal maturities from 1976 to 1999. Payment of both principal and interest is provided by the levy of Districtwide property taxes. During 1966, City of Berkeley voters formed Special Service District No. 1 and authorized the issuance of \$20,500,000 of General Obligation Bonds for construction of subway extensions within that City. Special Service District No. 1 Bonds amounting to \$10,530,000 were outstanding at June 30, 1975, with principal maturities from 1976 to 1998. Payment of both principal and interest is provided by taxes levied upon property within the Special Service District.

Bond principal is payable annually on June 15 and interest is payable semiannually on June 15 and December 15 from Debt Service Funds. Principal of \$14,025,000 General Obligation Bonds and \$280,000 Special Service District No. 1 Bonds mature on June 15, 1976. Interest of \$16,295,765 on General Obligation Bonds and \$237,858 on Special Service District No. 1 Bonds is payable on December 15, 1975. The composite interest rate on bonds currently outstanding is 4.12%.

NOTE D — Sales Tax Revenue Bonds

The 1969 Legislature of the State of California authorized the District to issue revenue bonds totaling \$150,000,000. Bonds amounting to \$69,395,000 were outstanding at June 30, 1975, with principal maturities from 1976 to 1980. The Sales Tax Revenue Bonds are secured by a pledge of the proceeds of the Transactions and Use Tax authorized by the 1969 Legislature and from moneys received by the District from other sources, in lieu of Transactions and Use Tax proceeds, if legally made available. The bonds maturing on or after January 1, 1976, are redeemable prior to maturity at the option of the District on various dates at prices ranging from 104% to 100%. The collection and administration of the tax, which became effective April 1, 1970, is performed exclusively by the State Board of Equalization and all taxes are transmitted directly to the appointed trustee for the purpose of paying bond interest semiannually on July 1 and January 1 and principal annually on January 1. Principal of \$13,665,000 matures on January 1, 1976, and interest of \$1,893,933 is payable on July 1, 1975. The composite interest rate on bonds currently outstanding is 6.49%. On July 1, 1975, bonds in the amount of \$19,495,000 were called prior to maturity.

The State Legislature extended the one-half per cent Transactions and Use Tax until December 31, 1977, or until the District has received \$82.2 million over and above the amount required to pay principal and interest on the earlier outstanding Sales Tax Revenue Bonds, whichever is sooner. The additional revenues are to be used for operational purposes including the liquidation of operating deficits. The District is authorized to issue negotiable bonds secured by such revenues in amounts not to exceed \$16 million in fiscal 1974/1975 and \$8 million in fiscal 1975/1976. Sales Tax Revenue Bonds of 1975 in the amount of \$16 million were outstanding at June 30, 1975, with principal maturities of \$8 million on January 1, 1977 and January 1, 1978. Interest of \$416,000 is payable on July 1, 1975. The composite interest rate on bonds currently outstanding is 5.15%.

The State Board of Equalization has estimated that the revenue from the Transactions and Use Tax for the period April 1 to June 30, 1975, will be approximately \$8,700,000, of which none had been received by the trustee or recorded by the District at June 30, 1975.

NOTE E — U.S. Government Grants

The U.S. Government, under grant contracts with the District, provides financial assistance for research, beautification, certain construction projects and transit vehicle and other procurement. Additionally, the District is administering federal grants to the City and County of San Francisco (CA-03-0004) for construction of three Market Street Station mezzanines, two street plazas and street extensions, and a grant to the City of Berkeley (CA-03-0009) in connection with the construction of subway extensions within Berkeley. The following grants were in force as of June 30, 1975:

NOTES TO FINANCIAL STATEMENTS CONTINUED

Project — Purpose	Maximum Grant	Funds Received
Beautification Grants.		
CALIF BD-1	\$ 447,953	\$ 360,000
CALIF B-160	260,253*	260,253*
CALIF B-161	499,296	499,296*
OS-CA-09-39-1074	838,565	749,470
Demonstration Grants.	2,046,067	1,869,019
CA-06-0021 (Transit Design)	6,157,256	6,157,256*
CA-06-0023 (Fare Collection)	922,997	922,997*
CA-06-0026 (Transit Hardware)	761,568	761,568*
CA-06-0032 (Prototype Vehicles)	5,000,000	4,500,000
	12,841,821	12,341,821
Capital Grants — Construction and Procurement.		
CA-03-0006	12,867,862	12,867,862*
CA-03-0011	13,103,910	13,103,910*
CA-03-0015	25,939,945	25,939,945*
CA-03-0019	88,000,000	81,394,957
CA-03-0047	1,000,000	778,000
CA-03-0052	38,136,666	26,618,000
CA-03-0058	1,700,000	1,470,000
CA-03-0059	61,845,066	45,254,666
CA-03-0069	28,906,133	10,736,000
CA-03-0083	1,172,000	268,000
	272,671,582	218,431,340
CA-03-0004 (San Francisco)	19,902,430	16,872,600
CA-03-0009 (Berkeley)	4,733,000	4,733,000*
	297,307,012	239,836,940
	<u>\$312,194,900</u>	<u>\$254,047,780</u>

* Project completed.

NOTE F — State of California Grant

Pursuant to Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. Under Section 30778 of the Code, further modified by an agreement with the State Department of Public Works, the District will reimburse the State for costs of the tube approaches. At June 30, 1975, the District had received \$172,513,000 of which \$55,610,538 is repayable to the State of California for the tube approaches. Reimbursement will be fulfilled by application of a \$16,500,000 credit to the District arising from highway betterments constructed with District funds on State Route No. 24 and by payment of \$1,000,000 on December 31, 1977, and \$2,500,000 annually beginning December 31, 1978.

NOTE G — Reserve for Self-Insurance

The reserve for self-insurance is presently limited, by resolution of the Board of Directors of the District, to a maximum of \$6 million to provide for the uninsured portion of general liability and property damage and workmen's compensation exposure. Policies for excess risks are in effect with major insurance carriers.

NOTE H — Construction in Progress

During the years, construction in progress decreased as follows:

Year Ended June 30	1975	1974
Balance at beginning of year	\$ 59,127,982	\$562,279,087
Add:		
Construction	67,403,872	82,120,740
Real estate acquired	499,926	606,616
Utility relocation	333,570	(46,732)
Pre-full revenue operating expenses	12,790,896	21,874,681
Other	6,860,323	837,125
Less:		
Retain-income and proceeds from sales of real estate	87,888,587	105,392,430
Transfers to facilities, property and equipment	232,636	174,230
Transfers to materials and supplies	130,226,035	607,726,380
Other transfers	2,030,860	705,261
	96,086	(62,336)
	132,585,617	608,543,535
	44,697,030	503,151,105
Balance at end of year	<u>\$ 14,430,952</u>	<u>\$ 59,127,982</u>

An analysis of project costs, based upon information available at June 30, 1975, was developed to determine the estimated cost of the rapid transit system at completion. This estimate amounts to \$1,621,340,000 (including \$179,878,000 for the transit tube being financed by the State of California and \$160,829,000 for transit vehicles being financed by Federal grant funds and other District sources). Presently, the final cost of the system cannot be determined, as future economic conditions, resolution of pending contractors' claims (Note I) and delay in start of full revenue operations may have a significant effect on the final cost of the system. Initial operation of the system began in September 1972. All 71 miles of rapid transit line were in regular passenger service on September 16, 1974.

NOTE I — Litigation and Other Disputes with Contractors

The District has filed suit against its consulting engineer, Parsons, Brinckerhoff-Tudor-Bechtel (PB-T-B), two of its primary contractors, Rohr and Westinghouse, a subcontractor, Bulova, and the primary contractors' respective sureties, seeking in damages approximately \$80 million from PB-T-B, \$41 million from Rohr, \$55 million from Westinghouse, \$4.5 million from Westinghouse, Bulova and PB-T-B, and in addition, \$50 million for loss of revenue from Rohr, Westinghouse, and PB-T-B. Special Trial Counsel is unable to comment on the District's ultimate recovery under this action. Some of the defendants may enter cross-claims against the District. The ultimate liability, if any, with respect to such cross-claims is unknown.

In addition, contractor claims amounting to approximately \$28 million have been submitted to the District. It is anticipated that additional such claims will be submitted in the future. Special Trial Counsel is unable to comment on the District's ultimate liability, if any, for these claims since they involve substantial factual and legal disputes which have not yet been fully analyzed.

Report of Independent Accountants

September 26, 1975

Board of Directors
San Francisco Bay Area Rapid Transit District
Oakland, California

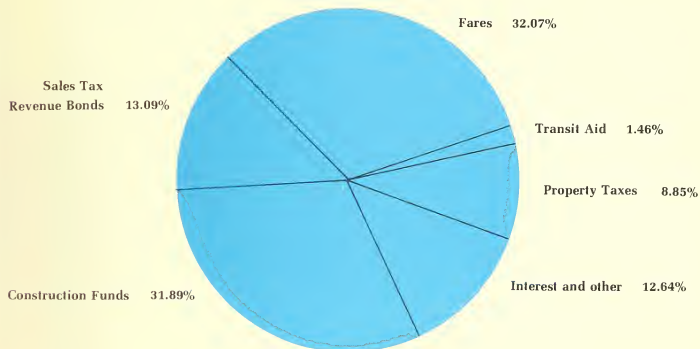
We have examined the balance sheet of the San Francisco Bay Area Rapid Transit District as of June 30, 1975 and 1974, and the related statements of operations, accumulated net revenues, revenues, expenses and fund balances of debt service funds, and changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As explained in Note A, certain pre-full revenue operating costs amounting to \$10,000,000 in 1975 and \$15,000,000 in 1974, which were incurred after achieving substantial revenue operations, were capitalized in the years ended June 30, 1975 and 1974. Under generally accepted accounting principles, these costs should not be capitalized. As a result, facilities, property and equipment and accumulated net revenues at June 30, 1975 and 1974 are overstated by these amounts.

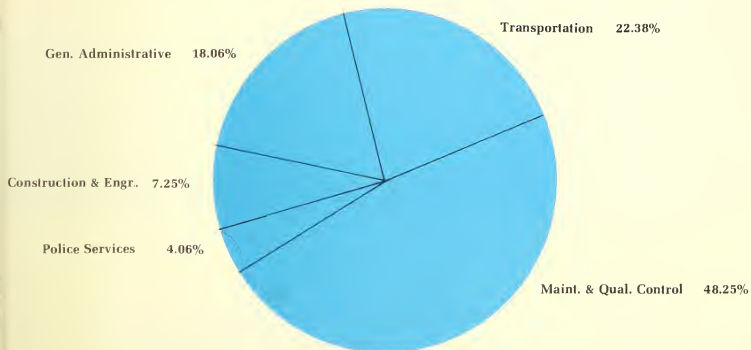
In our opinion, except for the effects of capitalizing the pre-full revenue operating costs as discussed in the preceding paragraph, the aforementioned financial statements present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1975 and 1974, and the results of its operations, revenues, expenses and fund balances of debt service funds, and changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Joseph Ross & Co.
Certified Public Accountants

WHERE OPERATING FUNDS CAME FROM:



HOW FUNDS WERE SPENT:





San Francisco Bay Area Rapid Transit District

This Annual Report for the period July 1, 1974 to June 30, 1975 is published by the District pursuant to Article 28770 of the State of California Public Utilities Code. District Headquarters are located at 800 Madison Street, Oakland, California 94607. Telephone 415-465-4100.



